

# THE MEDICAL AND SURGICAL REPORTER.

No. 2066.

SATURDAY, OCTOBER 10, 1896.

VOL. LXXV—No. 15

## ORIGINAL ARTICLES.

### INTRODUCTORY ADDRESS.\*

ELIZABETH R. BUNDY, M.D.,† PHILADELPHIA.

No duty of the many now so near will be pleasanter than the one assigned me for to-day,—to voice the pleasure of recognizing familiar faces,—to pronounce a greeting to new ones, and to say welcome, welcome to you all! To sound the first note cordial and friendly, with the hope that the harmony built upon it shall be a full and noble chorus, unbroken till we reach the year's end.

Many influences have turned your steps to this common ground, where all will stand for a time; from varying interests have you come, to work here in a common cause; that cause to seize and make your own such fruits of others' labors as you may. And more,—to learn your own powers for undertakings quite new,—to so develop and strengthen those powers that, four years hence, you may face the life before you with the calmness bred of knowledge, and the courage and confidence so indispensable for your future work, but

only justified in those well prepared to undertake it.

And we who meet you? We, too, are students; striving to be learners ever. We all belong to the working classes together. Those of us who have been thus engaged a little longer see but the wider field before us, and have the added incentive to put forth greater efforts for the sake of those coming, whose welfare is linked with our own.

This is *the* day of the year when you are all met together. Not one day after this will see you gathered as one class; even to-morrow you are no longer one, but four. A little looking ahead seems to be suggested here, a moment's survey of the common path through the land of common weal, before setting out.

What may you get at college? Only what others have gathered and set before you? I assure you, it will seem to you so at first,—and for many a day and month. So much you are shown which you must learn, so many things which, thus and so, you must do,—that all your time, and more, will scarce find room for them. It does appear as if the

\* Read at the opening of the Woman's Medical College, Philadelphia, Pa., September 30, 1896.

† Adjunct Professor of Anatomy, Woman's Medical College of Pennsylvania.

medical student, more than any other, has no choice as to the exercise of certain or all of his faculties. Differentiation of such original properties as we possess, does not proceed in an all-round manner while we are here. In this stage of our development so much of our vital force seems needed for assimilative purposes, that the power of spontaneity lies in abeyance. So the one plea I urge for student work is, that it be really assimilative, not merely absorptive. For that this is not so easy, as it is vitally important, you will find most true.

Self-examination by the conscientious man and woman would often reveal, at the end of the college course, an inward state rather surprising to one at the beginning. So fixed may become the habit of "remembering" the way one's text-book or professor has pointed out as good to walk in, that one finds one has yet to make, out of all this, a way of one's own.

You may fill your note-books from cover to cover with complete transcriptions of lectures,—you may pore over text-books and shine in quizzes,—you may "read up" for examinations, and get a hundred in every one,—and when you see your first "case,"—how it will surprise you to find that you do not recall just such an one, with the appropriate prescription all written out in that good "practice" note-book!—or that the authorities you have studied must have omitted to describe this particular phase of disease.

And yet the books are right, and the note-books too, only they deal with types and you will deal with individuals. One of our former professors is responsible for an anecdote which will illustrate this:—

A certain graduate in medicine, whose degree was still a very recent acquaintance, was hastily called to see a child in a convulsion. Upon witnessing the distressing condition of the little patient, his instinctive and prompt exclamation was: "Why, *why*, don't you send for a doctor!"

May it be that more than one "grave and reverend seignior" in the profession can bring to mind a similar experience? And is it possible for you, when your time comes, to escape this "bad quarter of an hour?" An old adage comes to

mind,—it would be a good one for the medical students' motto:—"In time of peace, prepare for war!"

Now, then, now is the time of preparation. Work your hardest, strive to your utmost to prepare for the war which you are so eager to wage! and still, when you are all alone with your first case, and realize that the doctor has been called, and you are she, be not surprised if you find before you a puzzle! This need not be disheartening. It is only that you will have yet to learn how you are going to use this knowledge, which you have so laboriously acquired by four years of work; whether you will be able to get, out of it all, the wisdom which must be of your own getting; whether, "with all thy getting" thou hast gotten the "understanding" which the years of preparation can but lead you toward! And since these years only can be your path to wisdom, vastly important do they become.

Professional acquaintances at home have been interested in your decision to "study medicine," have evinced the most encouraging faith in your probable success in the work they love; and I venture to say that nine out of ten of these kind friends have given one and the same piece of advice, namely:—"See all the cases you can, attend clinics!" And that is good advice, but there are "first steps" to be taken which will lead to this. Certainly you must learn the connection between the description of a case, and the case itself; only thus can you transmute theory into practice. But the "theory and principles" come first. Those now in the heat of the fray, have, perchance, mercifully forgotten, as one has put it, the soldier's first lessons while yet in camp; the days of drill, when he learned the meaning of "attention!"

Doubtless, ardor and enthusiasm count for much from the very first, but for steady push and staying power, can anything compare with the well-drilled soldier? These, then, are to be your days of camp drill. Now, again, the time for preparation for the war to come.

First, the study of facts discovered and established, to the mastering of such and making them your own, your first year, and indeed much of all four

years, will be well devoted. Hard grinding study of facts! some of them very hard and exceeding dry, alas! You will say: "Are we to spend our time only in trying to remember what some one else has learned?"

Ah, but remembering is not all! Be not content to know only that which is told to you in lecture or what you have told to some one else in recitation. This is but a part. What is given to you by professor and instructor only becomes your own as you use it for getting more; that more which is ever imperative, even while you are students. College will put the tools in your hands, and set your feet in the way. Your own wits must set themselves at work to do the rest.

Make thorough your knowledge of those branches which are in the college what the three R's were in the early temples of learning—anatomy, physiology, chemistry. Now that college courses are, properly, lengthened, the foundation may be well laid, upon which to build good work of the successive years. Soon will be added the observation and study of cases in the general clinic, and later on, you will make a nearer acquaintance with them in the classwork of special clinics.

It has been said recently, that the reason why medicine has advanced so slowly is because "physicians have studied the writings of their predecessors instead of nature." There was never a time when this criticism was more illy bestowed. Without doubt, a certain positive benefit follows the study of the work of others. The explorer in any field will hardly do well to turn his face from all indications that a predecessor has passed that way, but will rather avail himself of such as may exist, that here is a rock, there a pit-fall; or, on the other side, a safe and sure path through a bit of "bad land." What have the years to say to us, if they cannot tell of truths learned, which may be taken from their store and made our armamentarium?

This, then, is the end to be first attained by the medical student,—the equipment for further work. She who needs not to spend a few embarrassed moments in trying to recall the exact location of the heart, or in struggling to

think, "what is the function of the liver?" or in *being sure* of the physiological action of belladonna, for instance, will have the whole of her special clinic hour in which to discover what is wrong with the patient before her, and how to apply to the relief of that patient some of the principles she has learned.

That the future physician may make these first attempts while yet under the wing of Alma Mater, is one of the advantages of the longer curriculum. Already the student may, by observation and study of actual conditions, learn to make effectual, in her own hands, the methods of treatment studied elsewhere, and may lay up a little of experience for future use.

Then, as former years have bequeathed much to us, so we may endeavor to add what we may to the general store. Always there are questions awaiting answer. Even when, sometimes, we think they are disposed of, like uneasy ghosts they rise, and still we seek the spell to lay them. Each year we hope for the answer to the long familiar question, "what is automatism?" Each summer sees the capture of new microbes, brought to you direct from over the sea, this time,—whose ways that are dark you must learn, and whose vulnerable spot you may discern.

New theories of diseases, new remedies for old ones,—these and other things, the pros and cons of which you will have opportunity to dwell upon, will be duly presented to you. And, although no new bones have been discovered, nor new uses for old ones, there is room for activity in even so fixed a science as anatomy. For, while studying form, there still remains to understand the reason why, or function. Neither can stand alone, and the anatomist may help to solve problems. He may, for instance, hope to aid in dispelling the slight lingering uncertainty as to how we shall demonstrate to our complete satisfaction that the sense of taste depends upon certain known nerve-distribution.

I wonder if anything but personal experience will save the entering class from the custom prevailing among all students, of ignoring certain well-known laws of health? It would be such a good thing if you could believe that not

one of you is elected to prove the exception to the rule that the "sound mind" dwells in the "sound body,"—that the tired brain is not the brain whose work you may depend upon, and that time expended in needed rest will profit you fourfold. The great field of Preventive Medicine, which I like better to call Preventive Measures, is for you, here and now.

There must be much help for the students themselves, to come out of the increasing interest in the subject of hygiene and sanitary living. Already we owe a debt to the bicycle, as a convincing exponent of the blessedness of more rational dress. And what may we not hope from the realization of our dream of a gymnasium, which shall be a laboratory of health!

Then, perhaps, it need not be, when the fight grows thick, and examinations are perilously near, "one half of the students are taking potassium bromid to put them asleep, while the other half are taking caffein citrate to keep them awake", as was once the comment, perhaps not all undeserved, upon the students near the end of the college year. Rather, may we not then expect, that the graduating class of the future, the near future perchance, will receive their diplomas with a cheerful mien, and spirits as fresh and alert as upon the entering day of Freshman year!

Our work as students, with its incessant demands that we shall grasp and hold so much, forces us to bend all our energies to getting. It is the giving of things not charged in the bill, which distinguishes the true physician. And the secret of it all is sympathy, but sympathy in a very broad sense. Real sympathy comes of that in us which makes human fellowship so necessary and so powerful to aid. It is that by which the strong will and courage of the physician call the weakened forces of the patient to rise and be helped to health again.

As in no brotherhood will be found more of the interchange of mutual interest than in the medical profession, so in the college life, this gracious spirit finds a place, as is witnessed in the students' organizations for social and friendly, as well as scientific, ends. All experiences, shared, are deepened.

Even the interchange of the little courtesies which are among the amenities of life, bring a twofold blessing, upon "him that gives and him that takes." Through mutual interest in a common aim, mutual interest in a great and serious cause, which is vital to all, will grow the loyalty to each other and to our college which, more than other influences, will aid us, students and teachers, in attaining that unity in spirit and work, we all must recognize as desirable as it will be helpful.

In no other profession is the standard of perfection so constantly held before its followers, and no less, is the ideal of students and teachers.

What was attained in years past, is not the measure of that which we hope for in years to come, in this coming year, indeed! Which means that those before me, may be expected to leave a record more brilliant than any yet written. You have come, you will see, you must conquer!

In this undertaking, all who have our cause at heart will join the faculty in wishing you success! And thus, at the end of the years now before you, you will begin to stand alone—not yet in its fullest sense a "doctor", but well prepared to become a "doctor!"

#### For A Sinking Feeling.

That was what the woman complained of among the other ailments with which she exhausted the doctor's patience, until he made her up a little bottle of pills and gave her directions. Then she began again to talk; but at length, after many vain efforts to get her out, she started for the door. She had just opened it when she turned and said: "Oh, doctor, what shall I do if these pills do not cure me?" "Take the cork," he retorted; "they tell me it is good for a sinking feeling," and he called the next patient into his private office.—*Louisville Post.*

#### A Failure of Justice.

"All I demand for my client," shouted the attorney in the voice of a man who was paid for it, "is justice."

"I'm very sorry I can't accommodate you," replied the judge, "but the law won't allow me to give him more than seven years."



## FISTULA IN ANO.\*

F. FARWELL LONG, M.D.,† CHESTER, PA.

Some authorities claim that fistula is more common than hemorrhoids. As a rule, a patient is very much alarmed when you tell him that he has a fistula, but if you tell him he has hemorrhoids he regards it as a small affair. We very often have fistula and hemorrhoids combined, since sometimes one may produce the other. We should never be satisfied when we find one rectal disease until we have searched to see if there is any other. As a rule, men are more subject to fistula and women to hemorrhoids.

Fistula is usually preceded by, or is the result of, an abscess, and when we find a patient with an abscess in the rectum, we should tell him that he more than likely will have a fistula. If we do not do this, the patient will think it then existed but we were ignorant of it, and will likely get some one else to attend to his fistula.

Abscesses of the rectum are usually chronic (or cold) or acute. When an abscess is of the acute nature, it is very painful and the hard tumor can be circumscribed. They are usually found in strong, healthy adults. The chronic or cold abscess, or that resulting from a degeneration of tissue is not painful and cannot be circumscribed. This is a dangerous form of abscess. Either form should be thoroughly emptied.

It is often very difficult to account for an abscess. There is no doubt that traumatism is a great cause, but this will not explain all. I think constipation is quite as common a cause as anything. In my experience, I think more cases have been due to straining at evacuation and to dry feces held in the rectum than any other cause. I should like here to report a case of traumatism.

CASE 1. On April 10, 1896, I was called to see a youth, aged nineteen, who had been coasting down a hill on his bicycle and came to grief at the bottom, falling astride the frame. This caused

intense pain at the time, but in the course of a half-hour most of the pain subsided, so he was able to go on his journey. About four days afterwards, he began to suffer again with pains in the rectum and sent for me. Upon examination, I found a hard, painful tumor in the posterior part of the rectum, which I immediately opened, evacuating all the pus and giving instant relief. I thought, perhaps, he might recover without having a fistula, but explained the case to him. In two weeks afterwards there was a small, secreting canal, which I operated upon with perfect result.

The manner in which you open and treat these abscesses will largely govern the number of fistulas that will follow. It is best to use a knife with a good-sized blade and cut parallel with the rectum, for the reason that the external opening should not close until all the pus has been evacuated. It is always best to explain to the patient, especially if dealing with a deep-seated abscess, just what you intend doing. I thrust the knife in deep, then as I pull it out, make a good-sized external opening and put the handle of the knife in and thoroughly break up the abscess, which I carefully wash out with hydrogen peroxide and pack lightly with iodoform gauze. This should be repeated in twelve hours, or a weak solution of bichlorid may be used and the wound packed again, repeating the treatment daily until it is thoroughly healed, reducing the amount of gauze each day. If rectal abscesses are treated in this way, the number of cases of fistula will be greatly reduced.

Fistula in ano is divided into four varieties: Complete, blind external, blind internal and horse-shoe. Most authorities claim that the complete fistula is the most common, which in my small experience has not been the case, as I have never found but five of this variety. I do not say that more were not complete, but I could not find the internal opening. My first operation for fistula

\*Read before the meeting of the Delaware County Medical Society, at Rosedale Inn, Lazaretto, September 24, 1896.

†Visiting Surgeon to the Chester Hospital, Chester, Pa.

worried me much because I could not find the internal opening, and had obtained the opinion, as no doubt many others have also, that operations were not successful unless you did, which is wrong. In fact, I never search very long now for the internal opening, but push my director through the mucous membrane of the bowel and look for any other channels that may be present and divide them. It is a very uncommon thing to have a failure.

If you content yourself with only dividing the main channel and not searching for others and doing likewise with them, you are sure to have a failure. It must be remembered that these fistulous tracts are lined with hard cartilaginous material, which is very tough, has no vitality and will not heal unless freely divided top and bottom, or scraped out.

There seems to be among the laity, and a good many physicians also, the idea that rectal disease has some direct communication with the lungs, not only in disease but in health also it has strong hold on credulity. It is often hard to get a patient to consent to any operation about the rectum, even for hemorrhoids, and I have failed several times to obtain permission to do anything with the knife as they always fear some disease of lungs would follow. When I trace the origin of this idea, nine times out of ten it would come from some physician and all the arguments one could bring forth would not refute it. Older authors had the idea that the discharge from fistula in consumption had a modifying effect upon the disease. There are many to-day who still believe in this doctrine, but they do not believe, nor did they attempt to teach, that curing a fistula in a healthy person would result in tuberculosis. It is strange that, in this day of research and pathologic study, there are men who will, by an ill-advised word consign a person to a life of torture, by advising him against an operation which could do him no possible harm, but, on the contrary, relieve him of a life of suffering.

Another question arises. Shall we operate for fistula in ano in patients suffering from tuberculosis? Older authorities say no; but the teaching of to-day is more lenient, and they say if the disease is not advanced too far and

the cough severe enough to interfere with healing of the wound that you will not only cure your patient from the suffering and disgust of his fistula, but you will benefit his general condition; and many of our best surgeons have put such cases on record.

In selecting cases for operation one should be careful that the disease has not advanced to the stage of severe cough, as this would prevent healing unless it could be controlled and nutrition would be so poor that a wound in any part of the body would be slow to heal.

There are also the cases where we find many tracts or sinuses and not only many sinuses but we also find cavities of small calibre, and if any of these should escape our notice the wound would not heal because of the constant flow which is kept up. These are the main reasons why surgeons should be careful in selecting cases for operation among consumptives. I have operated several times upon phthisical patients and have no cause to regret it, as I am sure I have not advanced their lung trouble and have removed a source of constant trouble and worryment. I have also refused to operate on many, but I think in incipient phthisis the operation is always justifiable.

*Treatment.*—A great many cases get well themselves, as we have seen for ourselves. There are several ways of curing a fistula among which we all have our preference, one liking one way and one another.

I suppose the injection plan of treatment, or application of caustics was first introduced to meet the whims of the patients. The object of this procedure is to destroy the pyogenic membranes by means of the escharotic. Granting that this could be done, it is much slower than the knife and equally painful. Injecting caustics strong enough to destroy this membrane often destroys surrounding tissue and causes abscess. This plan is a very old one and the agents used were iodine, silver nitrate, nitric acid and carbolic acid. With modern surgeons, however, this treatment has almost gone into disuse. Agnew, in his book on the treatment of hemorrhoids, gives full detail of this form of treatment. Another very common treat-

ment is by elastic and non-elastic ligatures; the elastic, however, having the preference. Having never used either form I cannot say much for or against them; however, this seems a very poor form of treatment, as it only divides one side of the membrane, and we all know whatever form of operation we select, unless we destroy the base as well as top of the membrane, we are not going to have very good results.

The common operation for fistula you are all so familiar with that I will not go into technic, but only wish to say that where failure happens it is usually due to either insufficient preparation of the patient or not finding all the sinuses and destroying all of the membranes.



Another important thing to do is to trim off the edges of the cut tract to prevent any part of them re-uniting.

The last form of treatment I will mention is one I first saw described by Dr. Matthews, of New York, and a very excellent one it is too, as we can do it without our patient knowing there is any cutting being done. We almost always have a queer lot to deal with in these patients, and they will resort to anything, rather than have you use the knife.

Two years ago a man came to me with a well-developed fistula and said he had visited several very noted surgeons and they all advised an operation, which he refused to have done. I made an examination and found a fistula about five inches long, and as he would not consent to an operation I began to look for some other cure and found there was an instrument invented by Dr. Matthews, called the fistulotome, which I got. I made a date with my patient, telling him, by dilating his fistula I could cure him and I did the operation, and made a perfect cure. Since that time I have done others with very pleasing results. I do not offer this operation as being better than the ordinary one of laying open the tract, etc., but it has some advantages which the others do not have in selected cases. I present the instrument for your examination. You can

see it is very little larger than a probe. I usually take a probe and ascertain the exact course of the sinus and about its length and use cocaine either in the tract itself or inject it about the tract. Then pass this instrument in the length of the sinus. If the sinus is too small to admit it I dilate with laminaria tents which cause but little if any pain. Pass the fistulotome and by adjusting the screw at the handle, set the concealed knives to cut any depth. (I never let the patient see these knives as I only use them on patients who will not consent to cutting operation). Then slowly draw the instrument, cutting two sides of the sinus as it comes. When near the external opening I draw the in-

strument out rapidly, as cutting through the skin is the most painful of all the operation. There is very little hemorrhage and that is very easily controlled.

If I think necessary, I insert the instrument again and by turning it half way around make another cut, making four in all into the membrane, top, bottom, and both sides, thereby insuring good granulating surfaces and all without pain. If, after waiting a few days I find that I did not cut deep enough, I repeat the operation and keep the patient under observation sufficient time to be sure of a cure. The chief point is not to allow the external opening to heal until the sinus is closed. Over the ordinary operation with the knife this can claim four advantages:

1. It takes away all horror of the knife from the patient.
2. The sphincter and other tissues are not cut.
3. The excessive hemorrhage is avoided.
4. The patient is not confined to bed nor taken from business.

I think many of you may find this operation useful but it has a limited use. Let me say here, that the cutting operation as usually practiced, which is to divide all the tissues on the director, trim the edges, cut through the bottom and lay open every additional sinus is the one to be preferred in the majority of

- cases, where you can obtain the consent of the patient.

## DISCUSSION.

DR. JOHNSON.—May I ask Dr. Long if he uses anesthesia in these cases?

DR. LONG.—Yes. Cocain throughout the tract in all simple cases, general anesthesia for all complicated cases.

DR. JOHNSON.—What strength of solution do you use?

DR. LONG.—Two drams of a four-per-cent. solution are generally sufficient. I once used one-half ounce of a four-per-cent. solution and had trouble.

DR. BARTLESON.—Do I understand you to say that you never fail where you succeed in keeping the external wound open?

DR. LONG.—When the fistula is a straight tract, never; when more than one sinus exists, the operation may fail.

DR. BARTLESON.—There is a plan of operation which consists in cutting out the fistula, freshening the surfaces and sewing up.

DR. JOHNSON.—Will Dr. Long inform us what is the advantage of this operation?

DR. LONG.—The only advantage this operation has over others is simply that you operate without the patient being aware of the fact that you are using the knife. There are a certain number of patients suffering from anal diseases who will not consent to any cutting operation. This tendency has been somewhat fostered by the popular idea, which was at one time acceded to by some members of the profession, that the healing of anal fistula would produce disease of the lungs or tuberculosis of those organs.

I remember one patient who had suffered with anal fistula for four years. He had consulted the late Dr. Agnew, who assured him that nothing but an operation would relieve him. I told him I could cure him by dilating, to which he consented. I operated in this case twice and the patient was entirely cured.

The most painful part of the operation is the withdrawal of the knife through the superficial or skin surface. This difficulty is met by rapidly withdrawing the instrument upon reaching the superficial surface.

DR. FORWARD.—I have noticed that in some cases, after cutting and packing anal fistulae, they are slow to heal. In some cases, complicated by urethral stricture, I have found that, after cutting and dilating the stricture, the healing of the fistulous tract was much more satisfactory.

DR. ULRICH.—I would ask Dr. Long is the patient conscious of the cutting?

DR. LONG.—No, sir. A slight exclamation while withdrawing through the skin surface is the only evidence of disturbance met with.

DR. FRONFIELD.—In a large proportion of acute abscesses, we have complete fecal fistula.

In chronic abscess, due to the breaking down of glandular tissue back of the rectum, the fistula may be incomplete. Such being the case, I don't see how you can expect relief from this operation in acute cases.

DR. ULRICH.—Almost all cases in my experience are cured by puncturing into the bowel and cutting out, whether the fistulous tract already opens into the bowel or whether we make an artificial puncture. I may be a little old-fashioned in my treatment of anal fistulae, but I have treated a great many of them during a period of many years. I don't employ anesthesia so frequently as many others do, and find that I can treat many cases successfully without it.

My plan is to pass the Grove director in the bowel, find the internal opening, follow the tract down to the external opening, put the parts on a stretch and cut from without inward. I do not pay so much attention to former details, such as packing, etc. Dr. Levis formerly expressed himself in a similar manner in the manner of cutting, details, etc. He said, "Cut them out and they will get well without packing."

Only a few days ago, a lady came into my office for operation. I put her in the chair, turned the fistula out with my director, entered from the bowel, cut, packed it and sent her home. She was in bed a day or so. When I saw her, the packing had come out. She got well without any trouble. I don't care about lung complications, but operate when necessary. A good deal of trouble in minor surgery is in talking too much about the operation. The patient expects to be hurt a little and the operation can often be completed at the same time examination is made. I never interfere to control the action of the bowels, but let them alone. Most of these cases will get well.

DR. BARTLESON.—There is a great deal of pain connected with these operations, and I do not consider that the surgeon does his full duty by his patient if he undertakes to treat them with an anesthetic. I have happened to treat two cases with the ligature, but do not recommend it as a surgical procedure to be commonly followed.

DR. ULRICH.—Speaking of anesthesia, I am reminded by Dr. Dickeson, who was present, of a rather remarkable instance of hypnotism which occurred in a Philadelphia College some years ago. The case was as follows:

A girl, eighteen years old, suffering with epilepsy, was admitted to the Clinic. The case presented evidence of an old depressed fracture, due to a blow with a stone some years previously, since which time the epilepsy had been present. She was willing to be operated on, but only on consideration that Dr. Longshore should be present and use his mesmeric influence to produce sleep. Her request was acceded to. After the girl was placed on a table, he made a few passes and



told Dr. McClintock the patient was ready. A large T-shaped incision was made, three inches in length. The skull was trephined, the pressure relieved and the wound closed up with absolutely perfect results and complete disappearance of epileptiform seizures thereafter.

One of the unique features of the operation was the following: Whenever Dr. McClintock would move from one side of the table to the other, the patient would place her handkerchief to the corresponding eye and gaze out of the other eye at the class. After the operation was finished, she was asked if she had suffered any pain, and the answer was decidedly "No!" She said that when Dr. McClintock made the incision, it felt as though he was passing his finger along the wound.

DR. DICKESON.—A similar case occurred in the Bellevue Hospital, under Charcot. An operation was performed on the skull of an epileptic, in which the skull was opened, an abscess cleaned out and the operation finished without any pain. In another case, in the same institution, the patient said he suffered excruciating pain. There is a difference in cases.

DR. FORWARD, SR.—I have had some experience in operating upon fistula in ano, and, like most men, have some theories in regard to the trouble. I have an idea that most abscesses result from puncture of the wall of the bowel caused by straining at stool, from constipation or any other cause. Urethral stricture, no doubt, has its influence in the condition.

As the result of this perforation, the fluids

from the bowel percolate into the outlying structures, gravitate downward, and eventually produce abscess. Rupture may occur for months before abscess results. The point of selection for this rupture is generally about one inch, or perhaps a little more, above the sphincter. Wherever we have percolation of intestinal fluids, we will have infection, tumefaction, and eventually abscess.

The frequent cause of the recurrence of fistula, whether operated upon or not, is the fact that the rupture is high up. I have seen cases where the perineum seemed riddled with sinuses, some of them opening at a distance of one inch from the edge of the sphincter.

The operation for fistula is similar to all operations in which we have sloughing as a condition of the parts. There is no routine plan of operation. We must get at the point of leakage within the bowel, lay the parts freely open, curette to remove all pyogenic membrane, and keep open until the wound heals from the bottom. Unless this procedure is carried out, you will not cure your patient. I do not condemn Dr. Ulrich's plan. As most fistulæ open one inch above the sphincter, the operation frequently fulfills all indications. I think the mistake is often made in confining the patients to bed and treating the case antiphlogistically. It should be our object to induce congestion and granulation, and if we do not have sufficient of this within forty-eight hours, the operation is a failure.

The only connection there is between fistula in ano and tuberculosis is that the former, by its exhausting and debilitating effect, will sometimes prepare the body for systemic infection.

## ALCOHOLIC STIMULANTS IN THE TREATMENT OF DISEASES.\*

JAMES FULTON, M.D., NEW LONDON, PA.

For a very long time alcohol has been considered in its different forms as a very important adjuvant in the treatment of diseased conditions. This belief is perhaps partly acquired by constant association with the different stimulants kept by many in their houses as convenient remedies in the case of accident or sudden illness. Beginning with the babe in the cradle it is freely used in the colic. Many times have I been told, upon inquiring as to what remedies had been used, that only a little brandy had been given, saying that some physician had said that "it was the best remedy that could be used

in such conditions." Many physicians also encourage this view by constantly prescribing liquor, no matter how trivial the trouble may be. I have known practitioners, who, on being called to a case, would ask, "have you brandy or whiskey in the house?" If answered in the negative, they would say that some would better be procured, as it would in all probability be needed, and it generally was.

Thus confidence has been established with the laity. Young physicians beginning life and anxious to build up a clientele, feel oftentimes compelled to yield to the wish or will of those by whom they are employed in order to gain their favor. I have noticed in the

\* Read before the Pennsylvania State Medical Society, May, 1896.

laity, even among those professing temperance principles, that while in health, such doctrine will do to preach, but when they are ill they do not feel willing to practice it. They will denounce liquor with all the anathemas the vocabulary contains, but when they fall ill they will probably trust their lives in the hands of a physician who will liberally prescribe stimulants, and sometimes himself indulge in them as beverages. This would seem like a strange inconsistency. Education has thoroughly fixed in the human mind the idea of the importance of stimulation.

The theory is promulgated by many of those who teach and lead the profession that alcohol is one of the chief sources of heat, and that in low forms of disease, such as typhoid fever and consumption, it assists largely in tiding the patient over the difficult passes he meets in his journey; hence the stereotyped orders for whiskey and milk, cod liver oil and whiskey.

If it be true that liquor will hold together the flagging energies in disease, that same principle will hold good in health; yet we find in the Arctic regions, where men have been exposed to great degrees of cold and exposure, those abstaining from liquor have had the greatest powers of endurance. So with soldiers subjected to laborious marches; those indulging in drink soonest fall by the way. Not only do they not so well tolerate such long-continued labors, but they do not so well resist disease. No man with experience but knows the influence of intoxicants upon the economy should it be overtaken with serious illness.

Some of the most careful and observing army surgeons have long since condemned the dealing out of rations of whiskey regularly to men in the ranks, being thoroughly satisfied that it not only incapacitates for present duty, but that it prepares the soil for the seeds of tuberculosis, under which they eventually sink without any recuperative power, the powers of life and reaction being largely depressed by the action of the poison long continued upon the vital forces. This fact appeals to the judgment and common sense of all having the privilege of large observation, particularly in hospital practice.

The question naturally arises why alcohol, being so largely used, is not the useful instrumentality it is claimed to be in the production of heat. Dr. N. S. Davis gave to a strong man four ounces of strong brandy. At the end of forty-five minutes his pulse from eighty had gone up to ninety without any increase in fulness or force. His temperature remained the same. At the end of four hours his temperature dropped five-tenths of a degree below normal; his pulse came down to eighty, the same as in the beginning. Here there was nothing gained. There was only the loss of a half degree in body heat.

Dr. Norman Keen, in the *Twentieth Century*, says that, in the distant past when the station houses of London were not heated, men placed in them in an intoxicated condition, frequently succumbed to the cold. These two examples show, I think, conclusively, that alcohol will not raise body-heat, but has a material influence in reducing it.

Dujardin Beaumetz says all alcohols are poisonous. Dr. Richardson says alcohol has a particular affinity for brain and nervous tissue, particularly the pneumogastric nerve. Then why administer such remedies? Why keep the system saturated with it week after week with the notion of maintaining the body-heat, with the delusive hope of stimulating the powers of reaction? Dr. Frank Byne, Vice-president of the Pathologic Society, of London, says it is a functional and tissue poison and has no necessary use in medicine.

Such then being the character, the physiologic effect, is it not important that physicians should consider the possible or probable results of its long-continued use? Dr. Benjamin Rush was the first to inculcate the principle that alcoholism was a disease. A remedy of a character so insidious is, to say the least, dangerous. We do not wish to supplant one disease with another more loathsome, more deadly.

Again, how is any remedy that poisons the tissues, that impairs the brain and nerve structure, going to assist in eliminating disease instead of depressing the nervous forces? We want them in their full force and energy that they in their important functional force may assist the powers of recuperation. Alcohol

impairs metabolism, the force of the economy by which the waste matter is largely eliminated from the system. To give alcohol largely in such conditions would seem like taking the steam from the engine and asking it to perform its duty, taking the fuel from the fire and expecting heat.

Delirium tremens is another important diseased condition in the treatment of which alcohol has in the past been considered of the first importance. Well do I remember my first experience with this trouble. A young machinist came to me, honestly stating his trouble and saying he could procure no more liquor at the hotel as they refused to let him have it, but if I would get him some he could "taper off." I did so, procuring him the required quantity, but unfortunately, he was only the worse for my treatment of his case. I am fully satisfied he fully knew the consequences of the liquor when he came to me, and I suppose I should have known too, but from previous teachings was prepared to listen to him and grant his request. So besotted become the victims of drink they are entirely unworthy of credence, willing at any time to swear to the falsehood that will procure them the poison that is destroying them. Dr. Keen says that he has treated about 300 such and his universal rule is to remove the liquor from the patient, and that he has the best effect possible under tonics such as strychnia. By this treatment, with good food, they rapidly improve soon gaining health.

Dr. Keen again says that to the prisons and workhouses of Great Britain there are admitted not many less than 100,000 annually, the great majority being broken-down inebriates. Their liquor supply is forthwith removed, with the result that they rapidly regain health and strength. From my experience, in order to treat such successfully, one must have the power of controlling them. Without this power you can do them little or no good. When I have the chance to treat them properly I have done just as Dr. Keen has treated his patients and the results have, to me at least, been satisfactory. My opinion is that anyone resorting to this course will be entirely satisfied, not only with his patient but with himself, feeling that

he has done that which was best for all, under the existing conditions.

Dr. H. C. Wood declares in advanced chloroform and ether anesthesia alcohol failed in every instance to increase the size and force of the pulse, but in several instances helped materially in extinguishing it. His advice is in all cases during anesthesia to avoid all drugs except strychnia, digitalis, and ammonia and to remember that many of the deaths set down as due to chloroform and ether have been produced by the alcohol which has been given for the relief of the patient. In ordinary shock he says that alcohol is probably of no use at all. So well is he satisfied of this truth that he believes that a large dose of alcohol in such condition is equivalent to driving one nail in the coffin of the patient.

But I have gathered together evidence from observing, thinking men to arouse thought, hoping that it will so result that, in looking back over our pathway as physicians, we may be able to see it devoid of the mental, moral and physical wrecks that may follow the improper use of this powerful but dangerous remedy.

#### DISCUSSION.

DR. LAUTENBACH, Philadelphia, Pa.—This subject is too timely to pass without a word. When I was a student the great war cry was stimulate! *stimulate!* STIMULATE! At this time we find a great change in the position of some so-called stimulants. In my own practice I have had some very unfortunate experiences as a result of the old practice. Instead of alcohol being a preventive of tuberculosis, I have found it to be one of the most sure predisposing causes. Alcoholics are the first to fall ill when subject to the infection. I use alcohol very little, and unless used in small doses believe it to do harm. I had to stop its use largely in order to get the best results in my treatment.

DR. BORLAND, Allegheny Co., Pa.—This is an exceedingly interesting subject and deserves attention. It is especially important that we should recognize the change of view as regards the physiology of alcohol. We have been taught in late years that alcohol is not an ideal stimulant, that its action is more in the order of a narcotic, that its narcotic overshadows its stimulant effect. When used in typhoid it should be given more with the idea of tiding over nerve depression, not to stimulate. The question is, does alcohol furnish energy? We give stimulants to furnish energy. There is more tuberculosis in alcoholic families than in those not addicted to

its use. Alcohol is a drug we have not sufficiently studied to be reckless in its use.

DR. A. H. HARRISON, Harrisburg, Pa.—I am much pleased with Dr. Fulton's paper. It is proved that alcohol in small doses is useful to tone up digestion. Larger doses are irritant and produce hyperplasia. Its long-continued use may produce irreparable harm. In protracted cases is liable to do much harm. It should only be used in secondary fever during sloughing, and then in arterial stimulant doses, or to tide over brain exhaustion.

DR. HARE.—It seems to me there is danger in the medical profession accepting some of the authoritative statements made by medical men as necessarily true. The stand of Dr. Davis of Chicago, is liable to do great harm. In his reports he speaks of 210 patients treated in Mercy Hospital, which included a large number of alcoholics, and in which there was an exceptionally large mortality. He does not give the details of these cases, but simply states the mortality. In the profession of medicine there are two classes of physicians who represent the extremes of medical thought and opinion.

It occurs to us that the middle position is the safest and fairest to take. Alcohol is good to meet certain indications arising in certain diseases. The physician is called in to fit the remedy to the disease. The proper

dose is important. The experiments made in the case of Alexis St. Martin are deceptive and not to be taken as conclusive.

DR. BORLAND.—I think there are other agents for production of force that are more useful; such as beef-steak, foods, etc.

DR. HAINES.—Alcohol is one of the remedies too dangerous to be used by the profession.

DR. LEMOINE.—In the use of alcohol as a remedy we should consider its moral and social effects. It has been much abused both in health and disease. In my opinion I am not at all sure but that it would be better if it were eliminated entirely from the materia medica. There are undoubtedly many instances of its evil after-effects. In many cases we may substitute strychnia, quinine, heat, ammonia, kola, etc.

DR. FULTON'S REPLY.—Dr. Hare misunderstands Dr. N. S. Davis' tabulated cases quoted from Mercy Hospital. The table was simply used to prove that alcohol was not a preventative of tuberculosis. So eminent an authority as Dr. Wood says that alcohol will not help the pulse but that it may extinguish it. Dr. Frank Hay, vice-president of the London Pathological Society, says that alcohol in an active tissue poison.

DR. HARE.—Alcohol is burnt up in the body and adds energy to it.

## COMMUNICATIONS.

### TREATMENT OF RETRODISPLACEMENTS OF THE UTERUS.\*

E. E. MONTGOMERY, M.D., PHILADELPHIA, PA.

The forms of retrodisplacement are version and flexion. I do not propose to enter upon the consideration of etiology and symptomatology, but it should be remembered that displacement *per se* does not necessarily induce symptoms and consequently is not an absolute indication for treatment. It is only when the malposition is accompanied by congestion, inflammation, or hypertrophy that abnormal symptoms are exhibited. It is often a question difficult of determination whether the displacement stands in the relation of cause or consequence to the complication. Many of the symptoms are undoubtedly due to

interference with the circulation occasioned by the situation of the uterus at a lower level than normal.

The treatment consists in massage, mechanical measures and surgical procedures. The aim of treatment should be the restoration of the uterus to its normal situation and its maintenance there and the relief of symptoms. One of the earliest methods of treatment and one yet frequently pursued is the maintenance of the uterus in its normal position by the use of a pessary.

It should be remembered that the pessary does not correct the displacement and but serves to maintain the organ in a corrected position. A pessary consequently should not be intro-

\* Read before the Philadelphia County Medical Society, September 23, 1896.



duced until the uterus has been carefully replaced. Use of the support without replacement but aggravates the disease and the discomfort. The organ is replaced by manipulation. This may be aided by the position of the patient, as the dorsal and the genupectoral. With the patient in the dorsal position and the limbs flexed, one or two fingers of one hand are introduced into the vagina, while the other hand rests upon the abdomen. The fundus is pushed up by the middle finger in the posterior vaginal fornix, while the index-finger hooks in front of the cervix and pushes it backward. This action upon the lower end of the uterine lever carries the fundus forward until it can be grasped by the external hand and brought against or beneath the symphysis pubis. The existence of adhesions will prevent the replacement, or lead to an immediate return of the abnormal position, so soon as the restraining force is removed. Not infrequently it will be difficult, or impossible, to dislodge the fundus from beneath the projecting promontory of the sacrum. The dislodgment may be facilitated by grasping the cervix with a tenaculum or vulsellum and drawing up on the uterus until the fundus can be pushed forward, when the cervix is carried back. The genupectoral position, with the lips of the vulva separated, permits ballooning of the vagina and carrying upward of the uterus, but not necessarily with correction of the position. Drawing downward and backward upon the cervix promotes a restoration of the position. This may be expedited by pressure upon the fundus through the posterior vagina. The position corrected, the pessary may be introduced at once.

A third method of replacing the uterus is by the use of the uterine sound or repositr. The danger of traumatism, infection and the production of sepsis is so great as to render this procedure inadvisable. Care must be exercised in the use of the pessary to adapt the instrument to the patient and not the patient to the instrument. The proper length can be determined by measuring upon the examining fingers the distance of the posterior fornix from the posterior surface of the symphysis pubis; the proper width by separating the fingers.

The Mundé or Thomas modification of the Hodge is the best form of pessary, in that each has a thick posterior bar. Those with a circular opening for the cervix are objectionable, as the weight will sometimes drive the organ into the opening until the pressure obstructs the canal and prevents drainage. The pessary does not maintain the normal position of the uterus by supporting the fundus with its posterior bar, but by a pulley-like action of the vaginal wall over the instrument.

Pushing up the posterior fornix draws upward the cervix and the other end of the uterus lever, the fundus, consequently falls forward. The pessary is only applicable to those cases in which the uterus is free and is readily replaced. Even in such cases the organ may be so tender that the instrument cannot be borne or the displacement has existed so long that the posterior vaginal fornix has become practically obliterated and affords no space for the lodgment of the pessary. In such cases a preparatory treatment with tampons to stretch the vaginal pouch may be necessary. Such tampons may be composed of absorbent cotton, gauze or wool, saturated with a glycerin compound such as the boroglycerid, or a solution of ichthyol. Prepared wool is the best agent for the purpose, as it possesses more resiliency than the other substances. It may be arranged in the form of a collar, being pressed well up behind, after replacement of the uterus, and the ends brought forward beneath the cervix. The medicated tampon raising the organ to a higher level improves its circulation and through the influence of the glycerin unloads the blood-vessels and promotes the absorption of acute inflammatory exudate. It has but little influence upon old or chronic inflammatory conditions. In the more acute cases it soon renders the use of the pessary practicable. In recent displacements, in the married or parous woman, the pessary may afford relief to all the abnormal phenomena of which the patient complains.

When the organ has been kept at a higher level until the circulation is improved, the organ decreased in size and the ligaments contracted, the patient may then be able to dispense with the

use of the pessary. In the majority of cases, however, this must be continued for an indefinite period.

To the nervous, sensitive woman, the pessary is always a source of anxiety, and in all cases it should be frequently removed and cleansed. It is a foreign body and by its presence increases the vaginal discharge. Cleansing vaginal douches should be used, but the employment of douches containing the mineral astringents should be prohibited, as the salts are deposited upon the pessary, roughening its surface and rendering it a source of increased irritation. Not infrequently, the salts from the vaginal discharge encrust the instrument and the irritation causes granulations to spring up until the instrument is completely imbedded.

It is well to advise the removal of the pessary if it causes pain or increased discharge, and under any circumstances it should be removed for cleansing at least once in two months.

*Massage of the uterus* is productive of benefit in all cases of displacement. The manipulation and squeezing of the organ increase the activity of its circulation, promote the absorption of exudate and act as a stimulant of the muscular fibres in its ligaments. Massage finds its greatest efficacy in parametric inflammation and exudation. Fixation can be overcome and the organ rendered freely movable, but considerable time and patience are required for the accomplishment of these ends.

The practice of massage is contraindicated in cases presenting tubal collections of pus. As it is frequently difficult to determine the absence of such collections, massage should be employed with great circumspection in all suspicious cases.

*Surgical procedures.* The operative treatment of retrodisplacement has been a prolific field. It includes both extra-peritoneal and intra-peritoneal procedures. Sims advocated in cases of recent displacement that the uterus should be raised by a sound or repositor and the adherent gut pushed off by the external hand. Schultze advocated raising and fixing the uterus with the thumb in the vagina while two fingers are passed into the rectum above the fundus and the gut is dragged from the uterus by hook-

ing forward and withdrawing the fingers; the organ is then drawn forward beneath the symphysis pubis, where it is maintained by a pessary. Both of these plans of treatment are objectionable in that they are blind procedures and render possible the tearing of a pus-tube or injury of an adherent ovary.

Shortening of the round ligaments, as advocated by Alexander and Adams, consists in fixing the uterus through extra-peritoneal incisions. Originally, the operation consisted in an incision over each external inguinal opening, picking up and drawing out and fixing the round ligament by sutures, the superfluous portions of the ligament being cut off. Various modifications have been introduced. Thus, only the external ring is exposed, the ligament is picked up at the internal ring and drawn out on a straight line; or it is exposed in the canal by slitting the muscle up to the internal ring. It is fastened by silk, silver wire, silkworm-gut or catgut. The superfluous end is cut off, folded up beneath the subcutaneous fascia, fastened by a knot to the opposite ligament and buried in an incision connecting the two wounds, or the ends are pushed through the fascia and united by sutures. The operation is only indicated when the uterus is freely movable.

Some of the objections to its practice are: (1) That it is a blind procedure and may be performed when there are parametric adhesions that will produce subsequent discomfort; (2) it requires two incisions and often considerable dissection; (3) the ligaments are often so attenuated that they are discovered with difficulty and are unserviceable as supports.

The principal advantages of the operation are that it can generally be accomplished without opening the peritoneum, and that, beyond some pain at the eighth month from traction upon the scars, it is not found to interfere with the processes of gestation and parturition.

The intra-peritoneal procedures are either abdominal or vaginal. The round ligaments are shortened within the abdominal cavity by suturing together a fold of the middle portion of either ligament (Wylie), by grasping the cen-

tre of the ligament, stitching it to the side of the uterus (Dudley), or passing a suture beneath the middle of the ligament, through the anterior surface of the fundus and beneath the middle of the opposite ligament, which, when tied, brings the ligaments together in front of the uterus and swings the organ well forward (Mann).

The intra-abdominal operation most frequently practiced is known as ventral fixation or suspensio uteri. The steps of the procedure are a short median incision, separation of adhesions, bringing forward of the fundus, examination and treatment of the appendages and fixation of the uterus. Two sutures are introduced through the fundus, fastening it to the parietes. Various methods of suturing are used, buried sutures of silkwormgut, catgut, silver wire and silk, or through and through sutures which are subsequently removed. The buried sutures include muscle and aponeurosis, without peritoneum, or the peritoneum alone. The continuous chromocised catgut suture for closing the peritoneum and fastening the uterus to it by the two lower turns, while with the same suture the muscle and aponeurosis is subsequently closed, will prove very satisfactory. This procedure has the advantage over the Alexander operation in that it is (1) applicable to all conditions of the retrodisplaced organ, whether free or fixed; (2) it permits the careful examination and necessary treatment of the pelvic organs; (3) it requires but one short and clean incision.

The only disadvantage is that it has been found, in a large proportion of cases, to disturb the normal course of subsequent pregnancy and parturition. It is a question, however, whether these disturbances are not a result of faulty procedure rather than the proper performance of the operation. A peritoneal band of union will be amply sufficient to maintain the organ and will subsequently elongate to such a degree that it will not interfere with the physiologic enlargement of the uterus.

Various efforts have been made to secure ventral fixation without opening the peritoneum. An incision has been made down to the peritoneum and the uterus pushed into the opening and sutured. Sutures have been introduced

through the abdominal wall and fundus without incision, but all such procedures are blind and unsatisfactory, besides not being free from danger.

The instrument devised by Dr. Baum, of Kansas City, for passing a suture through the fundus and abdominal walls is only to be condemned; as is also the procedure of Shucking, which consists of springing a needle from a carrier through the fundus of an acutely anteflexed uterus and bringing it out through the anterior fornix of the vagina. A ligature carried back as the needle is withdrawn, when tied, holds the uterus in the anteflexed position. This plan presents the possibility of injuring the bladder or ureter, and does not fix the uterus in a satisfactory position.

Vaginal operations for correction of the displacement are done through either the anterior or posterior fornix. Duhhrsen's or Mackenrodt's operation known as vaginal fixation consists in a vertical section through the anterior wall of the vagina, pushing off the bladder until the peritoneum is reached, and the latter opened. Any adhesions of the uterus are separated by passing two fingers over its fundus and the organ is drawn forward with both fingers, tenaculum, or vulsellum. The anterior surface of the uterus is fastened to the vaginal wall. The operation maintains the uterus in many cases in a very satisfactory position, but the subsequent occurrence of pregnancy has been found to result in abortion or marked discomfort during the course of gestation, with ultimate complication of delivery. In some cases the uterus is brought forward with difficulty, and a number of cases are recorded in which the organ was so torn and injured as to render hysterectomy necessary. The operation has been modified by stitching the uterus to the bladder, thus obliterating the vesico-uterine cul-de-sac. Wertheim advocated utilizing the found ligaments through the vaginal incision. An incision is made similar to that in the Mackenrodt operation. The fingers are passed over the fundus, the appendages examined and a loop of first one and then the other round ligament is drawn down and sutured in the vaginal incision.

The operation of fastening the round ligaments to the anterior surface of the

uterus, as suggested by Mann, may be performed through the anterior vaginal incision and the peritoneum and the vaginal surfaces brought by sutures in contact with the uterus.

For retroversion or retroflexion with adhesions, Pryor has advocated an incision through the posterior fornix, separation of adhesions by the fingers, bringing the uterus forward, and introducing a large packing of gauze behind the organ to prevent it becoming again displaced. Gottschalk commends shortening the utero-sacral ligaments. If these ligaments are shortened, the cervix is drawn upward and backward, and as a natural consequence the other end of the uterine lever is carried forward in anteversion. The method of procedure is as follows: A median vertical incision is made through the posterior vaginal fornix, beginning half an inch behind the os, and extending downward about two inches. Douglas' pouch is opened and the peritoneal vaginal incisions are united by temporary sutures, the ends of which are left long, and serve as retractors to keep the wound open. When adhesions exist, they are broken up, the condition of the appendages examined and treated, and the uterus replaced. The left utero-sacral ligament is fixed with the tip of the left fore-finger as far as possible from the cervix; an assistant keeps the wound open by strong traction upon the temporary sutures. Under guidance of the finger and control of the eye a suture is carried from above downward through the ligament and tied, one end of the suture is threaded into a curved needle which is made to enter the cervix a little below the level of the internal os, and, carried deeply, emerges near the margin of the vaginal wound. The same procedure is observed upon the opposite, and the sutures are tied so that the knots lie in the vaginal fornix. A small strip of gauze is introduced into Douglas' pouch, and the wound is allowed to close by granulation. The patient is permitted to leave her bed on the seventh day.

In the treatment of retrodisplacements, as has been mentioned, the displacement is not generally of so much significance as the accompanying complication, and no procedure that does not take cognizance of the latter will

prove a satisfactory method of treatment. The proper treatment for the varying conditions may be briefly outlined as follows:

1. In recent cases, with a freely movable uterus, the medicated tampon or pessary. In many cases, the former will be required as a preparation for the latter.

2. In recent cases with a plastic exudate and adhesions (when pus-tubes can be excluded), massage supplemented by the medicated tampon and restoration of the mobility of the uterus followed by the use of the pessary.

3. In chronic cases, with a movable uterus, curettement, followed by suturing the round ligaments in front of the uterus through an anterior colporrhaphy.

4. When the displacement is complicated by disease of an ovary or tube, curettement, followed by abdominal incision, treatment of the affected appendage and fixation of the uterus to the abdominal wall.

5. When there exist adhesions without serious tubal or ovarian diseases, curettement and shortening of the utero-sacral ligaments after separation of the adhesions through the posterior vaginal incision.

#### Nature's Sarcasm.

People laughed a few years ago when the worst-diseased herd of cattle in a New England State were found on the farm of its agricultural college. The valuable animals were killed and the State stood the loss. So now people laugh when they read the reports of the ravages of the army worm here and there and notice that the greatest destruction it has caused in this State is on the farm of our State Agricultural College at Kingston.—*Providence Telegram*.

#### A Premature Claim.

Visitor—"Don't you guarantee to refund the money when you don't cure?"

Patent Medicine Man—"Certainly!"

Visitor—"Well, I've been using your remedy for five years and I'm not cured!"

Patent Medicine Man—"Keep right on, my dear sir! If our remedy fails we will refund the money to your executors on presentation of proper proof."



## NERVOUS SEQUELÆ OF INFLUENZA.\*

HORACE K. REGAR, M.D., PHILADELPHIA.

In my experience with influenza, I have noticed, as many others have, the profound impression made on the nervous system, the marked physical prostration, long continued, with mental depression, even to the extent of melancholia. Concomitant with these were, also, as you all have no doubt observed, sweating and chilliness, sleeplessness, poor appetite, continuation of gastric disturbance, with nausea and even vomiting, especially marked indisposition for all effort, either mental or physical, dread of impending evil. It would seem (if our powers of observation are not deceived) that having these symptoms at the beginning of an influenzal attack, we were led to believe that the affection lasts much longer than we have presumed, considering that we base our opinion on the duration of temperature. However, we know that these symptoms are not entities, or of themselves the sole malady, they being but pathognomonic of some more deeply-seated lesion or disturbance in the nervous system.

The great variety of manifestations in which "Grip" presents itself to our observation has no doubt had to do with attracting so much interest to it, but since Pfeiffer, of Berlin, has discovered the bacillus, there is no doubt but that in the future other investigators will turn their attention in that direction. We already attribute to this malady the existence of many serious, painful or uncomfortable afflictions of the various organs, making manifest many that were dormant which otherwise would have passed unnoticed.

Considering the effect on the nervous system, Althaus says: "Those cases predisposed by previously-existing nervous habit are nearly always sure to prove fatal." And again, at other times, grip seems to be only the accidentally exciting cause to a mental affection in persons who are strongly predisposed, or who have already suffered from pre-

vious attacks of insanity or allied neurosis. Thus, there may be a sudden attack of delirium tremens in an alcoholic, or acute mania in one who has already had it, the attack forming the last link in a chain of events tending to produce mental disturbance, which might also have broken out in consequence of any other exciting cause, or possibly without any such cause at all. Kræpelia has observed a sudden development of paralysis with aphasia and impaired memory, hypochondriacal and grand delusions.

The nervous sequelæ occur at varying periods after the apparently complete recovery, and are as various as the sequelæ effecting the other parts of the economy.

As I have before noted, the effect on the nervous system may be a simple vertigo or dizziness. Althaus speaks of a "Delirium of Inanition," as he calls it, occurring in a previously healthy young man, who had been strong and of steady habits, who suffered from the "Grip" and resumed his occupation before permission was granted. His fellow-clerks, however, noticed that there was a change; he became negligent, spoke in a foolish manner and made mistakes in letters and accounts, became untidy and disorderly, and at times delirious, but who recovered after treatment by rest, change and a nourishing diet.

The same author's words, speaking of the delirium of inanition are essentially appropriate when we take the cause to be a sudden exhaustion of brain-power from excessive destruction of the unoxidized albumen of the cerebral tissue. The inanition is so great sometimes as to lead to a fatal issue, the patients dying with symptoms of sudden cardiac failure and collapse, or it may go to the extent of profound depression or excitement. Of the cases of depression, Althaus mentions a case of incipient general paralysis of the insane, with recovery, and a case of general paralysis of the insane following a second attack

\* Read before the Pennsylvania State Medical Society, May, 1896.

of grip, that ended fatally. As to the effects of grip on an already existing case of insanity, both Savage and Althaus concur in their reports of cases where there has been a recovery from both maladies, or where, during the attack of the acute disease, there was a remission of the insanity.

Some intensely neurotic persons, who have had not only one, but two and some three attacks of grip, have not been troubled apparently after convalescence, either with psychoses or any other nervous affection. Dr. James Tyson reports a case of a robust woman who was attacked with severe influenza, resulting in marked nervous depression and sleeplessness who became almost helplessly paralyzed on the right side on the tenth day, by which time the general symptoms had subsided. She died suddenly a little later.

As I have before mentioned, the range of nervous sequelæ of influenza covers almost the entire category of nervous affections, but among the more frequent is neuritis, affecting the great sciatic, the various branches of the fifth nerve and temporarily causing loss of the sense of taste and smell.

Neuralgic pain in the sphere of the supra-orbital nerve is one of the commonest complications. Bilateral facial palsy, torticollis and epilepsy are also reported to be inheritances of influenza. Various forms of sclerosis of the spinal cord may occur after it, either as a primary sequela, or at a later period after other neurotic affections. Hemi-anesthesia has been followed by spastic spinal paralysis. Posterior lateral sclerosis is also recorded as a sequela.

Only recently there have occurred two cases of Landry's paralysis; one was reported in the *Lancet* for April 4th, a patient under the care of Mr. J. C. Bowie, a boy seventeen years of age, and another case as yet not reported. A case occurring in the epidemic of 1890 illustrates, in a measure, the influence this malady exerts on the nervous system. A woman, single, aged thirty-five, had previously enjoyed excellent health. After the attack of grip she had lost all confidence and nervous power, cried for no reason, had insomnia and loss of appetite. The knee-

jerk and reflexes were much exaggerated, and she was in a constant state of despondency. Another case is reported of a woman who was previously of a good and amiable disposition, but became melancholy.

#### DISCUSSION.

DR. LAUTENBACH.—This subject is one that has been talked and written about to some considerable extent, in relation to the causations of the various symptoms, but the bottom of the thing has not been reached. There are few diseases characterized so frequently as this is by the spontaneous rupture of small capillaries of the drum membrane.

The number of cases in which this occurs as a complication of influenza is larger than in all other diseases put together. This being the fact, it opens up a very interesting line of thought and investigation.

May it not be that sclerosis, paresis, various nerve lesions of the brain, spinal cord, and eye, may be expressive of small leakages occurring in those parts?

DR. REGAR'S REPLY.—The disease has not received the attention it deserves. We have on the program five papers relating to the treatment of typhoid fever, and only one relating to this disease, the unpleasant complications of which prevail all over the land.

An unusually high rate of infant mortality is shown in the statistics for 1895 in the Province of Quebec as given by the *Union Med. de Canada*. The population is given as 1,515,492; births, 58,653; deaths, 31,696, of which over 11,000 were due to contagious diseases. Over 10,000 were children from a day to one year old, and 5,220 were children from one to five years; a total of 17,532 children, or more than half of the total number of deaths. It ascribes this high mortality to the lack of knowledge of preventive science in contagious diseases and to neglect. Where the parents are ignorant, it should be some one's duty to instruct them in the necessity of isolation and disinfection and limit a contagious disease to the first one or two attacked. It also states that another cause may be the policies paid by certain life insurance companies, which speculate on the "little last-comer," so that the parents receive \$75 to \$80 if it dies. It protests against this practice as "immoral from every point of view." The deaths from intestinal diseases (4,068) were nearly twice as many as from tuberculosis (2,791).

## CURRENT LITERATURE CONDENSED.

A Survival of Savage Credulity.<sup>1</sup>

Dr. Dan Milliken, of Hamilton, Ohio, is evidently a man of comprehensive knowledge, close reasoning, rare humor, and remarkable power of expression. This we infer from a perusal of his presidential address, entitled "A Study in Credulity," delivered before the Ohio State Medical Society at its last annual meeting. He opened with a reference to the universal tendency of savages—a tendency shared by children and degenerates—to superstition, and particularly to the superstition of regarding disease as an evil spirit, something to be enticed or driven out of the body; and he proceeded to show that a conviction akin to that superstition had dominated the humoral pathology, still survived among the laity, and even now was not altogether conquered by physicians, so that it took a man of strong mind to stand out and not finally be influenced by the notion of the people among whom he was at work. This thought, he says, often comes to him when he hears a patient speak of his disease as "it." "We often hear," he adds, "that 'it' struck in, with the most serious results. I have been called out of bed to see a patient who was awakened with a numbness of the toe, and straightway sent for his brother, his doctor and his priest, lest 'it' should creep up to some vital organ and send him to the realm of shades in shameful informality. And very recently I saw a poor creature with a slowly failing heart and swelling legs who with the tincture of iodine had painted a garter about her leg in the vague hope that this might prevent 'it' from crawling up to drown her."

It was on some such notion, he thinks, that the old practice of bleeding, salivating, and giving repeated purges and emetics was founded. Up to very recent years, he says, intolerable drugs were put into the body "with a more or less definite idea of making it untenable to any other spirit than the owner, and the practice was carried so far that it was oftentimes a very nice question whether

the landlord of this house of clay—the Ego himself had not better move out and find quieter quarters. The notion of exorcising disease, Dr. Milliken imagines, has infected the surgeon, who "carries his voodoo in a dredging-box and calls it iodoform." "He doesn't precisely say that it is a lucky thing to use, though that is in his heart of hearts." "Press your surgeon hard enough and he will tell you that iodoforms slowly give off iodine in the wound or on its edges, but he will not tell you why it is better than other substances which do the like, nor will he impart to you a reason why he does not use iodine itself in known quantity."

After picturing the humoral pathology as "only a higher form of personification of the morbid principle," which "substituted a vague and shadowy entity for the half corporeal demon which had haunted pathology for so many centuries," Dr. Milliken says: "We do much better now. We have a pathology of the zymotic diseases which is harmonious and strictly scientific and conformable to the true spirit of induction. But it falls in my way to say, to-day, that it is not at all to the credit of our craft that the old credulity breaks out anew with every announcement of progress in bacteriology; greedy, gulping acceptance of principles, unproved and half proved, in bacteriology is the disgrace of the day; most of us have been obliged to change front three times on the bacteriology of diphtheria, and it is certain as death and taxes that we shall play the jumping-jack through future years if we do not, after the manner of scientific men, receive valuable hypothesis as hypothesis."

But it is not Dr. Milliken's opinion that, judged as a whole, the medical profession is credulous; its genius, he does not doubt, will meet and neutralize the evil tendency to credulity, for "it has ever been the proud boast of the doctor that he has dissipated doubt and superstition, has gone far beyond the bounds of his art to bring certainty and scientific apprehension to the world."

<sup>1</sup> Editorial in *New York Medical Journal*.

### Influence of the Nervous System in the Production of Some Skin Diseases.\*

Drug eruptions are generally of the class of nervous diseases. The drugs seem to act in a poisonous way on the nervous system and through the nerves governing nutrition cause various lesions of the skin, such as urticarias, erythemas or inflammations of the skin. The vaso-motor nerves control the circulation by their action on the muscular part of the blood-vessels, and consequently affect the nutrition of the skin. These nerves belong to the great sympathetic system, which system is very closely connected with the cerebro-spinal system. Thus we may see why a food or a medicine having a toxic effect on the nervous system profoundly affects the skin and causes the appearance of a variety of lesions. This we find not simply as a theory, but as a fact, verified in our daily practice. Eruptions caused by the use of such drugs as the bromids and iodids, are more frequently seen perhaps than others and are consequently more easily recognized. Moreover, they generally make their appearance as an acne and do not cause a great amount of worry. Eruptions from some other drugs, which are used in daily practice, are not so frequently seen and not as easily recognized. When taking the form of an erythema or a dermatitis, they may be mistaken for a scarlet fever or some other disease of a graver nature than the eruption really is.

Quinin is sometimes the cause of an acute eruption. Each individual subject to this influence of the drug has a certain form of eruption, which form of eruption is always taken when the drug is used, only differing perhaps in severity according to the amount used. Some individuals show a large urticaria and others a small one. Some show an eruption resembling measles, others a simple erythema, and some decided dermatitis. A little patient of mine proved so susceptible to the drug as to have a violent dermatitis from a moderate dose of it. It was used first as an inunction, and we concluded the cause of the redness appearing was from the local irritating effects. An ordinary

dose was given internally, which caused a much more violent dermatitis. The skin of the entire body was much thickened, hot and very red. The temperature of the skin was elevated to 102°, and the burning, itching sensation made the little patient perfectly wild. Simple applications to relieve the child, and withholding the drug, entirely permitted the inflammation to subside in a short time.

Many articles of food cause skin eruptions in some people. Their manner of producing these results is not materially different from the drugs we have just been considering. An impression, toxic or otherwise, is made on the nervous system, by which it is communicated to the skin and manifests itself as a skin disease. We will generally find there is a faulty digestion of the food which causes the eruption. We find urticaria of some form much the more common eruption from this cause. A young man was under treatment for a pruritis affecting principally his legs below the knees. It had existed four years or more and proved quite annoying to the patient. Observation of the legs showed lesions, solutions of continuity, but evidently nothing except what was made by scratching with the nails, on account of the pruritis. The itching was quite severe at times, not so bad at others, but never entirely disappeared. He had used many remedies, both external and internal, without any apparent improvement. Close observation of this case for a short time convinced me that the cause was to be found in some article of food of daily use. While watching the case and trying to figure out what article of food was causing the difficulty, he came in and reported quite comfortable legs, as they were not itching as usual. Inquiry as to diet showed that this time being Lent, he was eating very little, if any, meat. This was a piece of knowledge too valuable to be lost. Meats and fats were removed almost completely from his diet and his pruritis ceased to trouble him so long as he held to this diet.

Another case of a similar nature is that of a physician of this city. He ascertained that juicy fruits, such as apples, oranges, grapes and even toma-

\* William Frick, A.M., M.D., Lecturer on Dermatology, Kansas City Medical College.



toes caused a pruritis, mainly located below the knees, but at last extending upwards to the hips. The itching was so severe at times it woke him up nights. He remembered there was some of this trouble in spots on the calves of the legs when he was a boy of fifteen or sixteen. After he became a physician, he found out that when he was eating these juicy articles the trouble began and when he quit using them it stopped. Ointments or other medicines did nothing more than slightly palliate.

These last two cases would be called reflex manifestations. This simply means that the irritation is somewhere in the nervous system and is referred to the cutaneous distribution of the nerves affected.

We are coming to appreciate more and more the part the nervous system plays in not only subjective symptoms, but also in the lesions which take place in the skin, and why not? When we consider the perfect control of cutaneous circulation is through the nerves distributed to the vessels, we should not be surprised at lesions due to disturbed nutrition. When we study the glandular system of the skin, we find that every sebaceous gland and every sudoriferous gland is supplied with nerve filaments, and through these the work of secretion of the gland is carried on and controlled. No wonder then we sometimes find disturbed conditions of nervous centers giving rise to diseased conditions of these glands.

#### A Case of Precocious Menstruation.<sup>3</sup>

I have under my care such a remarkable case of precocious menstruation, that I feel it my duty to report it to the profession. In looking up the history of precocious menstruation, I find but little concerning it, and no case so remarkable as the one I have under my observation.

On October 10, 1895, I was called to attend Mrs. N., in labor. She is of a German family, well formed, strong and vigorous. This was her second labor, the first child having been a boy—a fine, vigorous child. At about five A.M., Mrs. N. was delivered of a girl infant, weighing nine pounds and normal in

physical condition. On the morning of the 17th, I was called to see the baby. I found the infant in good condition, sleeping well, and taking its nourishment as it should. I was told by the mother that upon her usual examination of the child that morning she noted a bloody discharge from the vagina. Upon examination, I found the condition as the mother had described it. The child seemed in no way disturbed. The flow lasted four days. In December, the flow did not return and the child suffered with all the nervous phenomena that usually accompany the missing of a period in an adult, and she broke out from the top of her head to the soles of her feet with an eczema that persisted for some time, but gradually subsided. Her mother attributed the non-return of the flow in December to a rather cold bath the day before the flow was expected. Since December, the flow has returned with perfect regularity, and the child is in good health, skin fair and clear, eyes bright and intelligent. The breasts and mons Veneris in the child are considerably developed, and during the flow the breasts enlarge and are somewhat sensitive to the touch. The mother's menstrual period was established at the age of thirteen years.

#### Dirty Thermometers.

How frequently we see physicians, says *Medical Age*, take the temperature of their patients, regardless of existing disease, wipe the instrument with their handkerchief—an article most likely to be full of germs—or a towel, or even use the corner of a sheet, then carefully place it away in a case holding a small amount of absorbent cotton to keep it from breaking, which latter is specially apt to preserve germs ready to be conveyed to the next unfortunate upon whom the thermometer may be used.

The bladder, when partially paralyzed from parturition or any other cause, can always be made to empty itself perfectly by throwing a large amount of very warm water into the bowels, thereby doing away with the necessity of using the catheter—a most important consideration, particularly when the patient lives at a distance from the doctor.—*Medical Times*.

<sup>3</sup> Prof. J. W. Irton, in *Medical Mirror*.

1853-1896

# THE MEDICAL AND SURGICAL REPORTER

ISSUED EVERY SATURDAY

THE BUTLER PUBLISHING COMPANY, Publishers

Editor and Manager

HAROLD H. KYNETT, A.M., M.D.

Associate Business Manager

WM. H. BUEB, M.D.

Editorial and Publication Offices, 1026 Arch Street, Philadelphia, Pa.

P. O. BOX 843

Editorial Staff:

A. L. BENEDICT, A.M., M.D.

SAMUEL M. WILSON, M.D.

**TERMS:**—One year, three dollars in advance. Four months' trial, one dollar in advance. Subscriptions may begin at any date.  
**REMITTANCES** should be made by Draft, Money Order or Registered Letter, payable to the order of the Butler Publishing Company.  
**COMMUNICATIONS** for the Editor, and books for review, should be addressed to the Managing Editor of the MEDICAL AND SURGICAL REPORTER, 1026 Arch Street, Philadelphia.  
**BUSINESS COMMUNICATIONS**, and letters referring to the publication, subscription or advertising department, should be addressed to the General Manager, P. O. Box 843, or 1026 Arch Street, Philadelphia.  
**CONTRIBUTIONS** of value to the medical profession are invited from all sources. Original articles, contributed exclusively to the MEDICAL AND SURGICAL REPORTER, will be paid for at liberal rates, after publication (payments made quarterly), or a limited number of reprints will be furnished as the author may elect. Extra reprints will be supplied at cost rates to the journal. Orders for reprints must accompany MSS. To ensure the return of contributions not made use of, writers must enclose return postage.  
**THE MEDICAL AND SURGICAL REPORTER** will not be responsible for the opinions of its contributors.

PHILADELPHIA, SATURDAY, OCTOBER 10, 1896.

## EDITORIAL.

### ABSORPTION vs ASSIMILATION.

In the introductory address, (appearing elsewhere in this issue) made by Dr. Elizabeth R. Bundy of this city at the opening of the Women's Medical College, points were touched upon of interest to more than the undergraduates who were chiefly addressed.

That too much of the education of to-day, under the various cramming processes in vogue, is more absorptive than assimilative few will deny, and nowhere is this fact more patent than in the average college for the study of medicine. The chief thought of the student seems to be to memorize as many facts as possible, regardless of the steps by which

they became known or of the conclusions which may be deduced from them as premises. Too often such "knowledge" will prove of avail to pass examinations with credit even, but almost without exception, students who graduate brilliantly by virtue of their great absorptive powers, form a large proportion of the mediocre class of the profession and also of those who drop medicine for other pursuits.

Their medical education consists of a miscellaneous assortment of heterogeneous facts, ready to spring to lip at the sesame of a question, a certain glib readiness in professional terms, and great proficiency in quoting authorities. They

alternate between the two extremes of rejecting all new discoveries with conservatism and suspicion because they do not agree with the facts they learned when at college, and enthusiastically accepting without reserve every new promulgation as absolute because their whole idea of progress is the committing to memory and this is but another form of that process. They begin their careers with the brilliancy of the rocket, and also, unless they have the necessary influence to elevate them into some professional chair, they end with the obscurity of the rocketstick. Sometimes such do hold positions of eminence, obtained through pulls political and otherwise, and they are the worst drags that the profession has upon its upward path, though they flourish in emolument and honor still through the process of absorbing the ideas and discoveries of the true man of science.

On the other hand the student who assimilates, recognizing study as but a foundation upon which a fairer superstructure of excellence is to be reared, may not always be letter perfect in quizzes, and only unfrequently has the magic words *cum laude* attached to his degree. Still, searching the annals of medical literature, we find that the steady progress of medical discovery has been mainly due to the patient work of such, and that the men who rise step by step, unaided, to success, whose names become as household words among their conferees, rank among those, who, as students, absorbed less but assimilated what they did take in.

Here is the ground for the plea to make thoroughly one's own what one does acquire. If a student finds that the measure of his mind is but a pint cup and there is presented a mental feast of about a gallon, he should not overdilate and thus weaken the tone of the mind, but judiciously select what will develop

mental force; take it slower and easier and in the end there will be no loss. If there was more stress laid just here, there would be fewer "half-way doctors" and more real physicians in practice.

It must be recognized, however, that reform must come from the college, more than from the student, untrained and bewildered with multiplicity of tasks, and judged through the amount of memorizing done. Let there be less rivalry to present to the laity an imposing course of lectures and ologies and other trimmings, crowded in the briefest possible time, and a greater striving for simplicity and thoroughness, and though there may be fewer M.D.s there will certainly be more physicians. The true solution of the problem of how to restrain the overcrowding of the field of medicine must consider this point as well as the raising of tuition fees and of the standard of matriculation requirements. Sift the would-be doctors thoroughly during the period of preparation, and let those whose minds are original and assimilative, if not largely receptive, have a better chance to come to the fore. In short, cram less, teach more.

Twin ectopic gestation is reported in the *American Journal of Obstetrics* by Minchard, who operated in the case September, 1895. The patient, aged twenty-three, had symptoms of rupture of an extra-uterine sac with severe hemorrhage. A fetus thirteen inches long was found in a mass of clot, and then a ruptured tube was removed. It contained a small and extremely flattened fetus, two and one-half inches long. The patient had not menstruated for nine months; the larger embryo was of the size of a six months' fetus, the smaller seemed to have only reached the third month of development. They were, in Minchard's opinion, the product of the single conception, the small fetus having been flattened by the larger. At the operation the opposite tube and ovary were found healthy. In April, 1896, the patient was four months pregnant.

## ABSTRACTS.

### A PRACTICAL CONSIDERATION OF GONORRHEA IN WOMEN\*

Not less than 12 per cent. of all the women who consult the specialist, exclusive of prostitutes, have gonorrhea or its sequelæ. It is the cause of not less than 15 per cent. of all cases of puerperal fever. It is responsible for 70 per cent. of all cases of sterility in woman. It is the skeleton in many a family closet. Næggerath was supposed to have exaggerated clinical observations until Neisser, Bumm, Sanger and Wertheim verified and vindicated nearly every assertion made in the modest little pamphlet of twenty-four years ago. What are the facts as now accepted?

The gonococcus of Neisser, in whatever diseased tissue present, is positive evidence of its gonorrheal origin. While the germ vegetates best within epithelial tissues provided they are delicate, soft and moist, it also proliferates within and on the peritoneum and induces inflammation in connective tissue. Dry horny layers of epithelium form an impenetrable barrier. It, therefore, flourishes in the vagina of young children and aged and pregnant women, but is rare in the same tissue of healthy adults. It thrives in the conjunctiva and mouth of the new-born and in the rectum of both sexes. Its presence in the urethra, the ducts of the glands of Bartholin, the vagina, the cervical canal, the uterine cavity, the tubes and on the surface of the ovaries causes inflammation of these organs. Its penetration into the lymph spaces produces broad-ligament infiltration, often leading to abscess. It can, by the same route, reach the hilum of the ovary and cause ovarian abscess without having passed through the tube. It can enter the circulation direct and reach remote organs, thus causing gonorrheal metastasis. The locations of choice are the urethra and the vaginal portion of the cervix.

A person may in time become accustomed to his own brood of germs, so that they may cease giving trouble. Let them be transplanted to new soil, they at once affect the recipient with pristine vigor. Now if these regenerated germs be returned to their original owner, they will imitate as vicious a recurrence as though they had never been there before. This is the explanation of "latent" and "recurrent" gonorrhea. Thus, too, a man and wife may finally become indifferent to their own germs, but a third party may be infected by either. This third party may in turn reinfect husband or wife, and these again one another. Chronic gonorrhea, therefore, affords no immunity against an acute attack. Infection may be propagated by other means than sexual congress in its natural or perverted forms. Towels, sheets, sponges, baths taken in common, infected instruments, contact with secretions at birth—all are known to have been carriers of infection.

In most instances of gonorrhea in women, we are called at a time when the disease has already developed a pelvic inflammation. The initial evidences about the vulva may have disappeared. When seen early, a little pus can be squeezed out of the urethra, and there is a redness about the mouths of the vulvo-vaginal glands. Urethritis does not seem to be nearly as painful as in the male, unless complicated by cystitis; nor is it as tedious. The red spots in the fossa navicularis may persist and furnish a clue to the identity of the disease when other symptoms have entirely vanished. Gonorrheal vaginitis is rare except in young girls, the aged, and when contracted during pregnancy. The vaginal mucosa, possessing tough epithelium convertible into epidermis, resists the invasion, except when constantly bathed by the discharge dripping from the cervix above. In acute vaginitis, the mucous membrane is highly injected, swollen and tender. There is

\*Marcus Rosenwasser, M.D., Professor of Gynecology and Abdominal Surgery in the Cleveland College of Physicians and Surgeons, in *Cleveland Journal of Medicine*.



a copious yellow or greenish-yellow discharge, sometimes tinged with blood. Examination causes considerable pain.

In women of unclean habits, the discharge causes irritation and swelling of the vulva and may infect the rectum. Not a few cases of anal fistula and rectal stricture in both sexes have their origin in gonorrheal infection. When inflamed, the vulva is constantly smeared with a copious sticky muco-pus of characteristic odor. A similar layer of ropy muco-pus on the cervix is a reliable clinical sign of gonorrhea, even when other landmarks are missing. The germ may long lurk in the crypts and folds of the cervical canal without ascending into the cavity of the uterus, causing a muco-serous discharge only. The introduction of a sound, or the use of cutting instruments about the parts, or any disturbance of the quiescent state may rapidly light up a peritonitis. Many a supposed puerperal sepsis may originate in this manner. The presence of the gonococcus in any of these secretions, as demonstrated by microscope and culture test, is proof positive as to the gonorrheal origin of the inflammatory and suppurative diseases in the pelvic cavity. Specific puerperal fever is usually distinguished from that of septic origin by later appearance, more tedious course, greater liability to recurrence and safer termination as to life.

Tubal infection is frequently followed by sterility. When not entirely closed, the tubes may be more or less crippled and may become the seat of ectopic pregnancy. Uterine gonorrhea is characterized by menorrhagia, dysmenorrhea, leucorrhea. It often causes repeated abortions, occasionally premature labor. While infection of bladder, kidneys and rectum is common to both sexes, the frightful consequences and untold misery of pelvic peritonitis and suppuration, and of puerperal sepsis have no parallel. Indirectly ophthalmia neonatorum and the specific vaginal infection of little girls seen especially among the filthy, can be permitted to follow in the wake of this procession of afflictions.

Time was when the diagnosis of specific salpingitis, or of pyosalpinx implied the verdict, laparotomy. We have so far recovered from this dictum of earlier days, that each case is now

judged without reference to class and is treated according to its individual indication.

Our efforts and measures for limitation and protection ought to be increased and improved in accordance with the well-known character of the disease. The sanitary supervision of prostitution has hitherto failed because of crude and incomplete methods. Those who are infected, men as well as women, ought to undergo proper treatment with prolonged subsequent observation before sexual relations are resumed. Marriage ought to be prohibited in case a complete cure cannot be effected. The physician should be scrupulously careful lest he convey germs by unclean instruments or hands. He should exercise the necessary precaution at childbirth to protect the babe against maternal infection. His instructions should be explicit and rigid to protect the children against all forms of contact in event of gonorrhea of either parent.

The Herculean task of prevention rests largely on our shoulders as medical advisers. In family life, gonorrhea is usually introduced by the diseased husband, either on the nuptial night or after sexual abstinence caused by absence, sickness or parturition. The bride, wife or mother comes to us in her innocence and ignorance often too late to avert the havoc wrought. We are even obliged to keep from her the real cause of her trouble. The male is the party to look to for redress. When he is infected, it does not take long for him to find it out, nor do we keep him in ignorance when, sooner or later, he is obliged to present himself for treatment. Whether he be a young man or erring husband, the culprit is for the time our prisoner. Here is our opportunity to impress upon him the evil consequences of infection. Dr. R. B. Hall says: "The family physician should impart knowledge upon every legitimate occasion upon the subject of gonorrheal infection. He should instruct the parents of boys, and the young men themselves, of the great danger to the health of their future wives should they contract gonorrhea. When we appreciate the fact of the great delicacy and hesitancy on the part of parents in talking

about these subjects to their sons, we begin to realize what an enormous subject we have before us. But it is a just and righteous one, and one that is bound to be thoroughly aired by the laity in the near future. The sooner the medical profession does its plain and whole duty in the matter, the better for us all. It is within the recollection of the majority of my hearers when we, as college students, were taught that gonorrhea amounted to but little more than a cold, and could be cured in nine days by a little balsam of copaiba and a mild

astrigent wash. We need not wonder at the position the laity take on the subject. These older teachings must be revised and the laity must receive instructions through the family physician. We should teach that gonorrhea is more destructive to woman than syphilis.

"When the laity become educated upon this subject as the profession now understand it, the abdominal surgeon will make fewer sections for these preventable diseases than he is now doing, and a corresponding amount of misery and death will have been prevented."

## SOCIETY REPORTS.

### PHILADELPHIA COUNTY MEDICAL SOCIETY.

Stated meeting, September 23, 1896.

The Second Vice-President, Dr. Thos. J. Mays, in the chair.

DR. E. E. MONTGOMERY read a paper entitled

"THE TREATMENT OF RETRODISPLACEMENTS OF THE UTERUS."

[See page 460.]

#### DISCUSSION.

DR. G. E. SHOEMAKER said that in considering the treatment of retroversion great care must be taken to determine whether or not the retroversion is the cause of the patient's symptoms. In many cases these are due to displacements of the ovary secondary to retroversion, to a relaxation of the broad ligaments, with a resulting venous congestion and a condition of edema and impaired circulation of both uterus and ovaries. If such steps are not taken as will replace the ovaries any treatment of the retroversion will be useless. The pessary is at best a temporary expedient and most men are trying to do without it as far as possible. It is never of use where there are adhesions and that is a point that is frequently lost sight of in attempts to use it. To this is due a large number of failures. The pessary is, however, useful in a small number of comparatively acute cases as a temporary expedient to hold up the uterus until involution can take place. When it comes to the permanent treatment of retroversion the question of the absence or the presence of fixation by adhesions must be determined, and it is a most important point. If adhesions are present such an operation as shortening the round ligaments is useless, and the pessary is useless. We are obliged then to

do some cutting operation which opens the abdomen, frees these adhesions and then corrects the displacement. In Dr. Shoemaker's judgment the best operation for this is ventrofixation of the uterus. This designation is a misnomer. The operation is not one of fixation but one of support; we form a band about three-quarters of an inch in length and of about the thickness of a lead pencil or smaller, which allows free movement of the uterus but prevents its falling backward and the consequent relaxation of the broad ligaments. It assists in the maintenance of the ovaries in their position. This fixation of the uterus has been said to interfere with pregnancy and there have been some cases reported of difficult labor. In Dr. Shoemaker's judgment this difficulty can be very largely obviated by putting the sutures in front of the line of the tubes instead of behind that line. This allows the fundus of the uterus to enlarge upward into the abdomen without making extreme traction at the point of attachment. If one ties down the top of the fundus by sutures behind the line of the tubes only the posterior wall can enlarge upward during pregnancy. Dr. Shoemaker had two cases in which pregnancy occurred and in neither had there been serious trouble. He had done the operation many times. In one of the cases of pregnancy sterility had existed for seven years, disease of one ovary and tube with bifid uterus complicating the retroversion.

In Dr. Shoemaker's opinion vaginal operations are not usually advisable. In the first place, if the bladder is stripped off the uterus and this wound is allowed to granulate there is produced cicatricial tissue in a region which is exceedingly sensitive to traction, the base of the bladder. The operation is to a certain

extent a blind one. The same objection applies to vaginal operations behind the uterus, especially if gauze is used and healing is obtained by granulation, which results in thickening. Dr. Shoemaker had had a great deal of trouble in cases with old cellulitis about the utero-sacral ligaments and he would hesitate to form scar tissues in such an unfortunate place.

The Alexander operation is useful in a very few cases with freely movable uteri, but Dr. Shoemaker would further limit the operation to cases in which there is no descent. The Alexander operation has little effect in actually holding the uterus up into the pelvis.

DR. J. M. BALDY maintained that retrodisplacements that cause suffering are almost always complicated, and complications of any kind whatever are contra-indications to the use of a pessary. A large number of retrodisplacements are unattended with symptoms and require no gynecologic treatment whatever. If a pessary be employed when a complication exists, the patient will, in a very large number of cases, not be cured and may even suffer an infinite amount of harm. The pessary, as well as minor operations, is responsible for a considerable number of cases of pelvic suppuration. Too often the complication is ignored while the retrodisplacement is recognized.

The use of the pessary may further be followed by the so-called "sore pelvis," in consequence of which many women's lives are made wretched.

The pessary has practically gone out of existence in the armamentarium of the nineteenth-century gynecologist.

Dr. Baldy characterized massage of the uterus as a mere refinement of masturbation. In his experience, it had done only harm. It is without use, except when a great deal of lymph is thrown out into the pelvis, when it may help stimulate absorption by gentle friction. To go beyond, would be to force the patient into more extreme inflammation and even into suppuration.

The disadvantages and actual harm resulting from the measures already mentioned leave practically only surgical treatment. When retrodisplacements are attended with symptoms, complications exist, and if these are ignored, little or no good can be done for the patient, while harm may result. The subject of surgical methods is yet an open one. There are but two operations, perhaps, that are worth considering—hysterorrhaphy and Alexander's operation. The rest are distinctly and absolutely bad. All of the vaginal operations are exceedingly dangerous. There is very little risk primarily, but the secondary effects are most disastrous. Cesarean section has been necessary to deliver patients thus operated on in whom the previous confinements followed a normal course; at times with death. Version and minor operations have been necessary sometimes in the same classes of cases. Of the two operations, hys-

terorrhaphy is decidedly the better procedure. It is, however, performed much oftener than it should be. The Alexander operation has a more limited field and for the same reason as the pessary—that is, the symptoms are always due to the complication and not to the displacement. The Alexander operation is followed by adhesions that give rise to bad symptoms. Even the advocates of this procedure admit that cases in which adhesions exist are not suitable for operation. It is often extremely difficult to determine whether or not adhesions exist in a given case. Hysterorrhaphy seems to be the best measure available at present, although attended with many dangers.

DR. J. M. FISHER also agreed that there are few cases in which the pessary is at all useful.

In case of retrodisplacement of the uterus, the first question that should be asked is, What is the cause of the retrodisplacement? There has not been sufficient said of late years upon the prophylactic treatment of retrodisplacements. We know that the majority of displacements originate in the puerperal state. For example, laceration of the pelvic floor takes place and leads to subinvolution of the vagina and of the utero-sacral ligaments, and this continuing at the time the patient rises from her bed, the uterus drops downward and backward out of position. Although these organs may even undergo involution, a laceration of the pelvic floor generally involves tearing of the muscle, which controls closure of the vagina. The levator ani muscle passes down along the sides of the vagina and around the posterior surface of the rectum, coalescing with the longitudinal muscular fibre and sphincters of the latter, and during defecation it serves the purpose of bringing counterpressure to bear in extrusion of material from the rectum. As it is the rule for women to be constipated, especially after having borne one or more children, considerable effort is necessarily brought to bear in defecation, so that the uterus, under these circumstances, is forced down into the axis of the vagina. The latter being relaxed, because of want of support, the body of the uterus is tilted back, and the intra-abdominal pressure being directed against its anterior surface, adds insult to injury. If this is frequently repeated, retrodisplacement results as a permanent condition. Retrodisplacement occurring in this way cannot exist for a long time without inflammatory conditions of the uterus, as well as of the appendages arising because of the want of proper circulation in the pelvic structures. The pelvic veins are valveless and very tortuous, particularly the veins that pass through the pelvic floor. When a rupture takes place in the pelvic floor, these veins are drawn out and straightened, and the resistance that is normally offered to the force of gravity is removed. As a result, the vessels become dilated and varicose, and passive congestion of the organs takes place, and this, as is well known, is the first stage of chronic inflamma-

tion. Another factor in the puerperal state that is likely to give rise to retrodisplacement is a full bladder, or a full bladder in connection with a full rectum. Women are often allowed to go three or four days after confinement without a movement of the bowels, or a whole day or even a day and a half without having an evacuation of the bladder. When a woman is suffering from a distended bladder, as well as a full rectum, and in addition wears a tight binder, pressing the uterus into a posterior position, the organ being much enlarged and undergoing rapid involution, this condition, if maintained even for a few days, will determine a permanent posterior displacement of the uterus because the uterus, with its supports, will accommodate itself to the new position. Much, therefore, can be done during the puerperal state to prevent the occurrence of retrodisplacements by sewing up lacerations promptly, by seeing that the bowels are emptied early, by attending to the evacuation of the bladder, and especially by not allowing the patient to wear a tight binder for eight or ten days. A binder should not be worn longer than twenty-four hours after confinement. Septic processes, as a matter of course, should be combated early. If the uterus is not in proper position, it should be replaced and be held in place by a properly fitting pessary. When a retrodisplacement exists, the uterus being movable and the woman becoming pregnant, or when a retrodisplacement occurs several days after confinement, during the process of involution, a pessary may be of use.

DR. W. EASTERLY ASHTON said that from a clinical standpoint, he divided all retrodisplacements, whether they were versions or flexions into three varieties: First, those that are recent; second, those that are chronic; third, those that are attended with complications. He held that in recent cases and in thoroughly uncomplicated cases a pessary is the only form of treatment available. Thus after the puerperal period a woman with a perfectly normal pelvis may have a retrodisplacement, the utero-sacral ligaments being elongated a pessary be introduced, the weight is then taken off these ligaments and they have a chance to regain their normal tone and to contract and the uterine displacement is relieved. Just such cases are occasionally seen in recent and uncomplicated state and they can be permanently cured by the use of a pessary. The number, however, is but a very small one. If an acute case is not relieved in the course of time by the use of a pessary, it then becomes an uncomplicated chronic case, and for this there is but one form of treatment. All cases, however, do not need treatment because all retrodisplacements do not give rise to symptoms. For those cases with symptoms as a result either of pressure or of interference with the circulation and for those characterized by a neurasthenic state, Dr. Ashton has but one treatment for and that is a surgical operation. Under these circum-

stances a pessary is not of the slightest use. Neither are gauze tampons because after the case has existed for a certain length of time the utero-sacral ligament has undergone fatty degeneration and will never perform normally their functions. Dr. Ashton never performs the Alexander operation because he does not believe that it will hold the uterus in place. This is especially true in those cases in which the round ligaments have been stretched for a long time and have undergone fatty degeneration. When the operation has been performed under these circumstances the uterus sinks again in a short time on account of further relaxation of the ligaments and the case is in the end as bad as in the beginning.

From a large experience, Dr. Ashton concluded that the operation of ventrofixation is the most satisfactory in the whole range of gynecology. As performed to-day there is no other operation attended with the same brilliant results. Dr. Ashton attached little importance to the reports of bad results and complications following ventrofixation, maintaining that the operation as performed in the United States is rarely done properly. If in a ventrofixation the sutures are passed through the fundus of the uterus and are then carried through the peritoneum, muscle and fascia and are then tied leaving them buried the operation results in an absolute fixation of the uterus and it is incapable of yielding. If the sutures are passed directly through all the structures of the belly wall the connecting band between the uterus and the parietal wall is so intimate and so strong that it virtually becomes a fixation. If an operation, which is faulty in its technic produces a true fixation there is certain to be trouble in future parturitions. If the operation is done properly, and it is almost as delicate in its technic as are some operations about the eye, the result is a ligament so delicate as not to interfere in the slightest degree with parturition and strong enough to act as a guy rope to keep the uterus in an anterior position.

In chronic cases it is necessary either to do something radical or to fall back upon the old plan of treatment by means of pessaries or plastic operations. None of the plastic operation devised upon the vagina or perineum is alone of the slightest use in correcting displacements.

In cases which are complicated, conditions apart from the retrodisplacement must be dealt with. If adhesions exist, the displacement is secondary; also, if an enlarged ovary or pus-tube is present, the displacement is secondary. These complicated cases are not to be viewed as examples of true retrodisplacement, nor to be approached clinically as such. But simply to be considered from the standpoint of a gross pelvic lesion. In a case complicated by adhesions these are broken and ventro-fixation is performed. When ovaries or tubes are diseased and require extirpation on both sides attempts at ventro-fixation of the uterus alone will prove useless. The best operation under



these conditions is supravaginal hysterectomy.

DR. G. BETTON MASSEY contended that the pathology of inflammation as understood to-day assumes the necessity of microbic invasion. Two conditions are necessary for the occurrence of an inflammation: a deficiency of resistance on the part of the tissue and the presence of a germ; but nothing is said in pathology about an organ being out of place or about valveless veins. Mechanical views of treatment are the natural result of looking upon the mechanical deviation as the important point. The initial trouble in all cases of retrodisplacement is the inflammation of the uterus. The suffering is due not to a deviation but to an inflammation and its consequences, and the proper treatment is to get rid of the inflammation. The deviation from the normal position is merely a deviation of the position of an organ that is freely movable in the natural condition. The fault is therefore not the deviation, but the inability of the uterus to get back to its proper position by reason of the inflammation and added weight. The ligaments have also suffered from inflammation and have undergone fatty degeneration. The proper course of procedure should be the treatment of the inflammation, the reduction of added bulk, the absorption of adhesions so far as they can be gotten rid of, and the stimulation of the muscular supports. It is not necessary to tear apart the adherent surfaces. Who would think of tearing loose the adherent lung from the chest in an old case of pleurisy? Will not the surfaces so torn apart always unite? Pessaries ought not to be used for the further reason that even in acute cases they so dilate and distend the vagina, interfering with the natural action of muscles, as to render these incapable of performing their functions subsequently. Pessaries may be necessary in very old women who have already used them for years, and are amenable to no other measure. In Dr. Massey's opinion the best means of treatment is to stimulate the metabolic activities of the tissues through applications of electricity inside of the pelvis.

DR. J. M. BALDY said that if the broad ligament is twisted on itself and carries the uterus and ovaries with it, the twist in the broad ligament will hold the fundus of the uterus posterior. Under such circumstances, relief from the acute suffering can be secured by replacing the uterus, when the broad ligament will untwist itself and the uterus will remain in place without any aid. In chronic cases, if fatty degeneration in stretching has taken place when the uterus is placed forward again, the broad ligaments will not hold it in position.

If the displacement be seen within the first week of its occurrence, and the uterus be replaced, a cure can be effected without the use of any support whatever, unless it be a soft wool tampon, keeping the patient quiet. A pessary, in some of these conditions, will tend

to bring about displacement or relaxation of ligaments by taking away from the ligaments their natural work, on the same principle that any tissue will undergo atrophy when not in use. No pessary introduced into the vagina will touch the fundus of the uterus when the uterus is in its proper position. Unless the pessary perforate the posterior cul-de-sac and enter the pelvis, it only gives support to the uterus by indirect pressure. The principal good a pessary will do, it effects by lifting the uterus up from below. In the acute cases, a wool tampon does this even better, with less chance of harm. The fact that the pessary is hard is an objection rather than a recommendation.

DR. G. G. DAVIS expressed the opinion that the uterus, instead of being suspended by the utero-sacral and utero-vesical ligaments, practically floats in the pelvis, and that the ligaments probably prevent its being displaced posteriorly. At all events, when it is pushed posteriorly, fortunately the ligaments are put upon the stretch. The pathology of retrodisplacements is probably to be sought in some of the alterations of the pelvic floor rather than in the ligaments. If the uterus were supported from below, any alteration or disturbance of the pelvic floor would naturally allow it to be displaced to one side or other, or forward or backward. Such alterations could readily occur in labor, followed by laceration of the perineum and other injuries.

DR. W. S. STEWART found in the garments worn by women and the method of dressing the principal cause of all retrodisplacements. Woman's waist has of late years been pushed down as low as possible and then constricted to the utmost degree. As a result, the abdominal contents undergo compression and displacement and the pelvic organs have their normal relations altered. When lacerations attend labor, the base of the pelvis gives way and further displacements result, not only in prolapse, but also in retroversions.

DR. P. FISCHER said that many of the cases met with in general practice do not require operative interference. Displacements of the uterus arise also independently of the puerperal state.

DR. E. E. MONTGOMERY added, in closing, that the pessary is especially of advantage in cases of retrodisplacement of recent occurrence. Thus, in a woman shortly after confinement, with a uterus retrodisplacement and subinvolved, the organ is heavy and remains subinvolved as a result of the displacement, with more or less relaxation of the pelvic ligaments. If the organ is freely movable, it may be replaced and supported temporarily by a pessary, and through the higher level thus obtained, the process of involution will be completed and the patient will in a short time be able to do without the artificial support. The uterus does not rest upon the posterior bar of the pessary. Anyone who introduces a pessary expecting it to lift up the

uterus by pressing against its posterior surface converts a version into a flexion, and with the organ compressed between the posterior bar of the pessary and the anterior surface of the sacrum, the distress of the patient will be greatly increased. The failure to replace the uterus prior to the introduction of the pessary has been one of the causes of added trouble and distress rather than relief. The Alexander operation is necessarily of limited application, which should only be used when the uterus is freely movable, and can be readily replaced and maintained in its normal position without difficulty. If the displacement returns immediately after the removal of the restraining force, there exist bands of adhesion between the uterus and the rectum.

The objection to ventrofixation, that it forms a band between the uterus and the abdominal wall, which may subsequently interfere with the processes of gestation and parturition, is a legitimate one. If the union is made between a small portion of the uterus and the peritoneal wall, this band will elongate and the patient will be less likely to suffer in subsequent gestation and parturition.

Dr. Montgomery introduces one suture about the centre of the fundus, in the transverse line, and a second suture just behind this, so that, practically, the uterus is brought into a state of ante flexion.

Massage properly employed is an aid in bringing about absorption of exudation and separation of adhesions, and relieves patients who would otherwise necessarily be subjected to operative procedure. It is a matter of regret that the surgeon cannot always imitate nature and reinforce the ligaments which suspend the uterus in its normal situation. Normally, the uterus is not in a fixed position; it moves about through a number of degrees—backward, forward, from side to side, upward and downward. If, however, the womb is the seat of a lesion that leads to its displacement, whether a bad laceration of the perineum or fatty degeneration of the muscular structures, whatever the cause, it is impossible by any other method of procedure to restore these tissues to their normal position and to sling the uterus once more in its normal place; consequently, it is necessary to do the best one can to place the organ in that situation in which it will give as little discomfort as possible to the individual, in which its circulation will be promoted and favored, and in which an inflammatory exudate and enlargement will be absorbed, and this is accomplished most effectually by one of the methods of fixation named.

While there is need for an operation that will not interfere with the subsequent processes of the individual, and that will aid in restoring her to as nearly a normal condition as possible, no method of procedure is as likely to afford greater relief than is procured through the operation of ventral fixation. The operation is, however, applicable only in a limited number of cases. In some cases, it is possible that the operation of fastening the

round ligaments in front of the uterus will serve a useful purpose. It will not do so in every case, for the reason that the ligaments frequently undergo such changes from the long-continued duration of the displacement, that they do not afford sufficient resistance to serve the purpose.

#### DR. J. M. FISHER presented a SPECIMEN OF MULTIPLE FIBROID OF THE UTERUS

removed from a patient fifty-two years of age, two days previous. The woman had been suffering from abdominal pain for a number of years and other symptoms referable to disease of the pelvic structures. Previous to the discovery of the tumor she had been confined to bed and placed on the rest-cure for about six months.

The fibroid condition was complicated by the presence of an intraligamentary cyst upon the left side. Inflammatory disease of both appendages was likewise present. Some difficulty was experienced in dissecting out the cyst. In removing the tumor the cyst was incised on one side, and it was at first thought that the bladder had been penetrated.

After the operation the patient did well and was getting along very nicely, the temperature having declined to 99.5°, circulation being good.

#### Local Treatment of Diphtheria with Sodium Hyposulphite.

Dr. Henry A. Wickers states (*Lancet*, June 6, 1896) that he has for some time been using a solution of sodium hyposulphite as a local application in diphtheria, and has been well satisfied with the results—three or four applications having generally been sufficient to clear away the false membrane. The solution is prepared for use by mixing equal parts of pure glycerine and a saturated solution of hyposulphite of sodium in water, and is applied with a brush to the exudation and inflamed fauces once or twice daily, or as often as may be deemed necessary. The glycerine, by its adhesiveness, keeps the solution longer in contact, and also by its well-known local action helps to relieve that engorgement of the mucous membrane which seems specially favorable to the growth of exudation. It is probable that the hyposulphite has a continuing action as a germicide, in the following manner: Chemical decomposition is first set up by contact with the acid secretions of the mouth and throat, sulphur and sulphurous acid in a nascent state being set free; the latter, being gradually converted by oxidation into sulphuric acid, would in the same manner decompose further portions of unchanged hyposulphite, and so on until the hyposulphite was exhausted. Of course, this local treatment will not interfere with the general treatment, which must be adapted to the necessities of each individual case.

## PERISCOPE.

## MEDICINE.

**Treatment of Chronic Gouty Affections.**

Murrell (*Lancet*, June 6, 1896) has successfully treated the acute manifestations of chronic gouty affections by a local application for which he gives the formula in full. He takes half an ounce of iodide of potassium, dissolves it in half a pint of rectified spirit—methylated spirit is used in hospital practice—adds one ounce of soap liniment, and then half a drachm each of oil of cajeput and oil of cloves. A piece of lint is soaked in this mixture, wrapped around the affected parts, covered with protective, and kept in place by a bandage. It acts as a powerful counter irritant, and the inflammation usually subsides in from twelve to twenty-four hours. In addition, he not uncommonly gives a drachm of colchicum wine with ten grains of iodide of potassium three times a day. These large doses of colchicum wine induce brisk purgation, sometimes accompanied by vomiting, but they speedily cut short the attack. This mode of treatment is especially useful in cases of robust, full-bodied men in active employment, to whom the loss of a day's work is a serious consideration. In sciatica, lumbago, and rheumatism affecting one joint, the local application of a liniment containing half an ounce of salicylate of sodium, half a drachm of cajeput, fifteen minims of oil of eucalyptus, and half an ounce of soap liniment in six ounces of rectified spirit affords prompt relief.

**Cerebral Manifestations of Lead Poisoning.**

Davidson (*Liverpool Med. Chir. Journ.*, July, 1896) reports a painter, aged twenty-three, who had worked on board ship almost exclusively with white paint, noticed about a month before his admission into hospital that he was unable to fasten the buttons of his clothes on account of tremor of the hands. Three weeks after he had an attack of colic. He had had temporary loss of vision on several occasions, and occasional loss of speech. On January 31st he felt a slight pain in the head, which grew more severe, so as to cause him to cry out, and on February 3d he suddenly became unconscious, and was convulsed, the attack lasting three minutes. Half an hour after he had another similar fit. When admitted, the patient was of a pale, sallow complexion, had a marked blue line on the gums; was drowsy, irritable, and childish in his manner, and complained of pain in the head. He refused to take food, and resisted attempts to feed him, attempting to strike and bite the nurses. He turned in bed from side to side, jerking his head forward, his behavior suggesting an hysterical condition. Severe frontal headache prevented him sleeping. There was no paralysis; the superficial reflexes were lively; the

knee-jerk was exaggerated, but there was no ankle clonus. There was marked tremor of the eyelids and slight tremor of the hands. The tongue was slightly coated, the breath was offensive, and the bowels were regular. The pulse was 48, the valves of the heart were normal, and the organ was free from hypertrophy. The urine was high-colored, sp. gr. 1029, and faintly acid; it contained no albumin; urea 2.9 per cent.

The patient continued to have attacks of convulsions, and though drowsy, complained of frontal pain. He was treated with potassium bromide and iodide, chloral hydrate and purgation. The optic discs were blurred and indistinct. The patient gradually became worse, and died on February 7th. The temperature was normal throughout until the day before death, when it rose to 100.2°.

At the autopsy no adhesion of the dura mater was found, but there was considerable injection of the pia, which, along with the arachnoid, at the base and over the cerebellum, showed a faint milky opacity. The brain substance was solid; the convolutions were a little flattened, and there were slight adhesions in the Sylvian fissures; the right ventricle appeared normal; the grey matter was rather thin, and the striæ not well marked. The stomach was intensely injected at the fundus, where there were a number of submucous hemorrhages; the jejunum was also congested in patches. Many of the liver cells were degenerated, and the organ was finely fibrous throughout. The kidneys were congested and tough, the capsule laminated, the cortex uniformly red; each weighed five ounces; microscopically, they appeared finely fibrous throughout.

A chemical examination of the brain was made by Mr. J. R. Johnston, who found that 50 grammes contained  $\frac{1}{2}$  grain of lead, equal to  $\frac{1}{10}$  grain of the entire organ. The liver and intestines contained small quantities of lead, the liver containing more than the brain.—*Med. Chron.*

## THERAPEUTICS.

**Thiosinamine for Inoperable Tumors and Cicatricial Contractures.**

Tousey (*N. Y. Med. Jour.*, May 2, 1896) has been experimenting with thiosinamine, and studying its literature for over a year and a half, and he considers that "it possesses positive curative properties in causing the resolution of benign and malignant tumors, and the absorption of cicatricial tissue." Thiosinamine is, chemically, allyl-sulpho-carbamide, and its constitution is expressed thus— $\text{CS} < \begin{smallmatrix} \text{NH} \\ \text{NH} \end{smallmatrix} \cdot \text{C}_2\text{H}_5$ , corresponding to urea,  $\text{CO} < \begin{smallmatrix} \text{NH} \\ \text{NH} \end{smallmatrix}$ , in which the oxygen of the carboxyl group



has been replaced by sulphur, and one atom of hydrogen in the amine group replaced by the allyl radicle.

Thiosinamine is soluble in water, alcohol, and ether, but, like other mustard derivatives, it decomposes in aqueous solutions. Its first use in medicine was reported by Hebra in 1892; he had experimented with it in the hope of finding a cure for lupus. He used it as a hypodermic injection of a fifteen per cent. alcoholic solution into the muscular tissue between the shoulder-blades. He began with a dose of one-half to three-quarters of a grain injected twice a week. In lupus cases this was increased to one and a half to three grains twice a week, and even these large doses were well borne.

Van Hoorn has used a ten per cent. solution in equal parts of water and glycerine, which was found as active and not so painful as the alcoholic solution. Hebra rarely reached three-grain doses. Other observers have used four and a half grains as a regular full dose, but Dr. Tousey has never found it necessary to exceed one and a half grains. He made his injections into the muscles of the arm and forearm, and never found any ill effects arise. With the alcoholic solution a sharp pain is experienced lasting for less than a minute.

The author found, as Hebra had done, that it is desirable to discontinue the treatment for ten days every six weeks or two months.

Hebra and Van Hoorn have reported bacteriological experiments with thiosinamine which proved that the presence of thiosinamine in culture media retarded or inhibited the growth of micro-organisms, though even strong solutions did not kill the bacteria. Hebra studied the physiological effects on animals; on injecting three grains daily for a month into a dog weighing twenty-two pounds the dog remained perfectly normal, but became ravenous, and gained nine pounds in weight. On man the effect is that of a very mild tonic. If the subject is sound there are no symptoms produced, and if there is a lesion present the reaction which may occur is local, and is not accompanied by any general symptoms. There is in all cases a tonic effect with increase in weight. Hebra has noticed marked diuresis, which ceases after a number of injections. No renal symptoms have ever been noticed, nor the appearance of albumen or other pathological products in the urine.

Richter studied the effects of thiosinamine injections on the blood. He found, half an hour after the injections, a decrease in the number of leucocytes to about one-third of the normal, but at the end of four hours the number had increased to normal or beyond, and in some cases there was well-marked leucocytosis, persisting for forty-eight hours. The amount of hemoglobin was regularly increased, but there was no marked change in the number of red cells. There was no special effect on the number of eosinophile cells, but there was a uniform increase in the number of multinuclear leucocytes.

The effect of thiosinamine on pathological conditions is that of a powerful absorptive, acting probably by increasing the activity of the lymphatic system. This effect is seen in the absorption of serous exudations, which is usually accompanied by marked diuresis. It is also visible in its effect on lupus, corneal opacities, cicatrices, glandular swellings, and neoplasms. The absorptive effect is so active locally that in some classes of cases a latent process may be fanned into an active one. This is especially so in its use for clearing up opacities of the cornea; if there is the slightest inflammatory condition present, this will be very much aggravated, and treatment will have to be suspended.

Its use in lupus is of historical interest, since this was its first therapeutic application. Hebra and Van Hoorn observed a great effect on this disease wherever the superficial area of disease was large, but no case of complete cure is reported. The therapeutic use of thiosinamine in clearing up corneal opacities has met with almost perfect success in the hands of all investigators, and they all report cases of complete cure of cicatricial contractions, due to burns or other injuries. Hebra found it to cause very rapid absorption of chronically enlarged glands, except when these had a syphilitic origin.

Dr. Tousey reports a case of "typical keloid," following an extensive burn of the arm. The keloid affected two areas each of the size of a silver dollar, and projecting three-quarters of an inch above the surface. Dr. Tousey used hypodermic injections of thiosinamine into the left biceps twice a week. He began with a dose of two-thirds of a grain in 10 per cent. solution in absolute alcohol, and the highest dose used was a grain and a half. The cure was complete after twenty-seven injections.

In another case, one of "inoperable" recurrence after carcinoma of the inferior maxilla, Dr. Tousey found thiosinamine injections cause lessening of the induration, whilst the foul sloughing ulcerated surfaces became cleaner.—*Med. Chronicle.*

An efficient obtundent for hypersensitive teeth is given in *Dental Cosmos* by Dr. Genese of New York, with the following formula:

R. Cocain.....	4 per cent.
Carbolic acid.....	50 per cent.
Benzoin gum.....	46 per cent.

As a result of an examination of several liquid extracts of malt on the market, Edgar L. Patch, of Boston, says that not one of these had a particle of diastasic power. They contained from three to ten per cent. of alcohol, but it is not reasonable to believe that they are of any more value than pure beer, or some preparation of extract of malt and alcohol.